ECLECTIC MAGAZINE

Foreign Literature, Science, and Art

Vol. CXLIV. THIRD SERIES VOL. XIII. JUNE, 1905.

No. 6

SHALL WE PUT THE CLOCK BACK IN BIBLICAL CRITICISM?

A REMONSTRANCE.

From time to time a "writing on the wall" disquiets those who are set to guard the interests of knowledge. There is a feeling in the atmosphere of coming change: the mystic writing is everywhere visible, to the educated world in general as well as to the priests of science. There are not so many however who can interpret the writing, and those who undertake to do so may easily mistake the character and extent of the change which the signs portend. For it requires much sifted knowledge, intellectual flexibility and sensitiveness to new mental conditions to form a just opinion as to the state of any particular subject of inquiry, and as to the methods which may be required to enable investigators to solve new problems. It would be a great favor if some lay-student of ancient history, possessed of sufficient leisure, as well as of those higher gifts to which I have referred, would tell historical specialists what he thinks of the present position of the historical study of antiquity, and of the requisites for a fresh step in advance.

Dr. Emil Reich, a much-travelled and widely-read man, may perhaps become such a benefactor, if he can moderate his tone, and be a little less eager to make points, and-I fear I must addif he will resume for a time the critical and philological study of some special branch of ancient history. At present, I must confess that his range appears to me to be dangerously wide, and illuminative as his Success among Nations may on the whole be, his knowledge of Biblical antiquity and of the critical literature respecting it looks very superficial. And yet, so helpful is it to see ourselves sometimes as another sees us, that I have endeavored to give my best attention to his article in last month's Contemporary,1 in connection with the corresponding pages of his Success, in which the critical opponents (as he accounts them) of Lycurgus and of Moses, of Homer and of David, of the prophets, and of One whom only under compulsion would I name in the same breath with those heroes. Jesus Christ, are smilingly condemned.

The article opens sensationally enough with an attack on the study of words. Of course, this need not be

¹ "The Bankruptcy of Higher Criticism." By Dr. Emil Reich. Eclectic Magazine May 1905 taken au pied de la lettre. But to indulge in such a vast paradox seems to me somewhat unfair. If I attempt to divine what the author means, he will, from his secure point of vantage, be able to say that this is what he does not mean. But he certainly seems to me to mean that the exact study of the literary form of historical traditions is superfluous-i.e., leads to no results conducive to the progress of humanity, and that the heroes of philology are undeserving of the popular respect which some of them at least have won. To which I reply of course that the conception of philology has materially changed within the last century, and that while it would be a grave mistake to return to the earlier form of the conception, we should be guilty of impiety towards the past if we blamed our predecessors virtually for not having lived in the 19th century. Can there really be any educated man who does not know that the phrase "classical philology" has so expanded its meaning as to have become equivalent to "the study of classical antiquity," and can this study be unconducive to the progress of humanity? We may admit that in the transition period many classical scholars made unwise historical conjectures through attaching too much importance to real or supposed linguistic facts. But was not this natural and therefore pardonable, and have not their faults been a warning to their successors? And must there not be some futile conjectures before the one brilliant and successful hypothesis, which adequately explains the hitherto known facts, can be produced?

I quite admit that Biblical philology has lagged much behind its classical sister. Certainly it is no longer a mere study of words, though it will be a bad

day when the words of the Biblical writings cease to be carefully and methodically studied in the light of an improved, even if far from perfect. grammar and lexicography. But it is only feeling its way towards a higher stage, and while some of its votaries may be too cautious, others may be almost too bold, thinking that they serve the community best by willingness to incur the risk of making mistakes. On this subject I shall say a little more presently, when my first duty of replying to Dr. Reich, so far as his vague and paradoxical statements admit of being replied to, has been accomplished. What I venture to urge at present is that Biblical philology cannot justly be condemned as a mere study of words, considering that it is slowly but surely becoming transformed into something which may, relatively to its former stage, not unfitly be called "higher criticism."

Whether classical philologists may rightly be said to have "raved" in the 18th and early 19th centuries, and whether recent discoveries in the Roman Forum can be said to have reinstated the personality of Romulus (this is what Dr. Reich's statement seems to me to suggest). I leave others to decide. But it may be well for me to say here as a fact, and not as a mere opinion, that the theory which is now advocated by a number of leading German Assyriologists, that "astral myths are the outer garment of the Biblical stories of primitive times" (I quote from Hommel, whom Dr. Reich apparently regards with some favor), is not the result of mere "philological jugglery," but a fine specimen of concentrated intellectual work,2 and an attempt, by no means wholly unsuccessful, to penetrate to the centre of

ject." It is equally possible for the most brilliant genius to fail for want of an accurate knowledge of facts.

² Dr. Reich: "By a certain knack of erudition, and with a minimum of thought, it is possible for the most mediocre genius to pile up a volume upon practically any given sub-

the Babylonian, Canaanitish, and probably to some extent early Israelitish view of the world. If I am not myself an adherent of any particular form of this theory, it is partly because I think that, owing to the backwardness of the mass of the "higher critics," the text of the Old Testament, even as revised by "moderate" scholars, is not sufficiently correct to sustain the weight either of Winckler's, or of Zimmern's, or of Hommel's, or of Jensen's new critical structure.

The reader will, I am sure, pardon me if I, who differ considerably from both parties, devote a few lines to the defence of Dr. Hugo Winckler on the one hand, and the mass of "moderate" Old Testament scholars on the other. Without (I am sure) suspecting that he misrepresents anyone, Dr. Emil Reich leads the reader to suppose that "the philological school of historians" are destructive critics, and that Dr. Hugo Winckler is one of their chief leaders. Dr. Reich must, I think, know better than this, but he probably dashed off his article too quickly to be able to revise it. Of course, if he had looked again into a few of the works of "moderate" scholars, both in England (Britain) and Germany, he would have seen that the reconstructive tendency has been gaining more and more strength, and that summaries and conspectuses of critical results relating both to the Old and to the New Testament, with a view to tracing the history of Jewish and early Christian literature and religion, are yearly increasing in number. He would also have noticed that though "moderate" critics of the Old Testament to-day adopt more from Assyriology than formerly, yet they are very distrustful

both of Winckler and of Hommel, so that if these daring scholars, who are first Assyriologists and only in the second place Biblical scholars, are "higher critics," other scholars (e.g., Driver and Kautzsch) cannot very well be "higher critics," and vice-verså,

In defending Driver and Kautzsch, I am discharging a duty of personal friendship. In defending Winckler I am but obeying the impulse, common to all true Englishmen, of standing by those who meet with less than full I am no follower of Dr. justice. Winckler, and have not his personal acquaintance. I know that he has faults. But which of us has not? I confess, I do not think that any one can afford to ridicule his neighbors: and, were this the time to do so, I could easily show by examples the unwisdom of making merry over ill-understood novelties.8

That Winckler carries his theory too far. I should be the last to deny. He is too eager, and almost too resourceful, and he is (like many other persons) not sufficiently strict in his treatment of the Hebrew text. He is also deficient in sympathy with religious ideas and experiences, the justification of which, however, he would not venture to deny. What he says in reply to this latter charge is that there are twoways of looking at great religious personalities; you may regard them either in the light of the future, or in that of the time which to them was present; and that he felt it to be his own call to endeavor to replace those personalities in the position which to their contemporaries in general they appeared to occupy.4 If he had stated this earlier, he would have avoided giving offence to many worthy persons. Shall

fact may not be always what naturally suggests itself to a Western reader.

³ Dr. Winckler has often given cause for Dr. Reich's misapprehension. But he has in his recent works been careful to explain that mythical details are not, in his view, inconsistent with a substratum of fact, though the

^{*}See especially his "Abraham als Babylonier, Joseph als Aegypter," Leipzig, 1903-

we not, however, accept his explanation, and recognize that we have in him a specially gifted historian of Semitic antiquity? He belongs doubtless to a small school, whose self-assertion is out of proportion to its number. But he is perhaps the only man competent to review one of the earliest and greatest of the reconstructive works of recent "higher critics"-the History of the People of Israel,5 by Pro-Such a review-courtfessor Stade. eous, elaborate and thorough-going-Winckler has written (see his Kritische Schriften, vol. i.). At least, the articles I refer to are virtually a review of that work, though nominally they deal with Stade's modified re-statement of his views in an academical address, given some ten years after the publication of the History. Nor can it be urged that Winckler is merely a carping critic of other men's work. He has shown how in his opinion the work that Stade did inadequately (how could it have been otherwise?) may be accomplished somewhat more perfectly, by tracing for us the outlines of a possible history of Israel, based on a combination of new facts with old, and illuminated by a criticism which at any rate presupposes some first-hand acquaintance with the primitive Eastern system of thought and belief.

Dr. Winckler is now a Berlin professor; he is therefore no "little philological pedant in some obscure German town." He has also, if this is a recommendation, had some contact with the "rough realities of life," even if not for such a lengthened period as the great Lessing. And if he has sometimes been led to express his mind rather too freely, yet he would be the last to disown the debt which all searchers after truth owe to the "higher critics" of the 19th century;

see how justly he speaks of Stade. He is not one of those who despise literary criticism, though he certainly does think that the reconstructive work of literary critics is premature, and that the discovery of the wide extent of Babylonian influence is destined to modify and correct—one might indeed say, to revolutionize—views too exclusively drawn from the imperfectly understood contents of the fragmentary Hebrew writings.

Dr. Emil Reich is a great believer in the personal factor in history. No one will blame him for this. It is a familiar observation that some historians dwell more on personalities, and some more on intellectual currents and tendencies. Both classes of historians deserve recognition. But in dealing with antiquity it is often extremely difficult to get the desired information respecting worldmoving personalities. Sir Arthur Helps, in his romance Realmah, devoted infinite wit and tenderness to imagining the personal factor in a remote age of the human race. And many an ancient narrator has sketched the favorite personages of tradition on a basis partly at least derived from the imagination. The critical historian, however, must be on his guard against the phantasms of the imagination. Even in Greek and Roman history, in which tradition may justly claim much more respect than was formerly accorded to it, we cannot venture to assume the correctness of unconfirmed details of a romantic appearance. And in Hebrew history, considering the strong subjectivity of the Biblical narrators, we can still less afford to follow the literary tradition, where grounds for suspicion exist, and where there is no external evidence for the facts. I am myself one of those who hold the historical existence of a personage called Moses to be unproved and improbable. It is quite illegitimate to neutralize the critical arguments for this view by a backward gaze of the

s "Geschichte des Volkes Israel." Von Bernhard Stade. Berlin, 1887-88.

eve of the imagination.6 Gladly would I be introduced to such religious heroes as the Abraham and Moses of the Pentateuch writings. But even those who once clung tightly to Abraham as a person, are now, for good reasons, loosening their hold, and one can hardly doubt that the same will shortly be the case with the ill-supported belief in Moses. I wish that the facts were otherwise, but no conscientious philological scholar can allow wishes to dictate to his historical criticism. It is no use to answer that just as the Reformation presupposes the historical character of Luther, and the Franciscan Order the historical character of St. Francis, so the existence of the Jews presupposes that of their founder Moses. The sayings and doings of Moses cannot be said to be presupposed by the national existence of the Jews, nor can even the existence of the Franciscan Order give us secure data for deciding the vexed questions as to the life of St. Francis. It is, however, perfectly legitimate to say that the narrators of the lives of Abraham and Moses were, relatively to their age, themselves great personalities, and that they were all the greater because of their supreme humility in not giving a thought to personal fame. And still greater are the personalities of the chief writer-prophets.

Let me now, strictly under compulsion, express a doubt whether Dr. Emil Reich is justified in appealing, both in his Success among Nations and in his article, to popular religious prejudice. He may no doubt conceivably be himself in a perfectly naïve state of mind, and share the prejudices of the majority of regular church-goers—i.e., he may be a sincere but narrow Christian, and may really think that the "higher critics" are doing all that they can

⁶ Karl Hase aptly called Ewald "ein rückschauender Prophet mit der orientalischen Zungengabe" ("Kirchengeschichte" p. 582).

to undermine the religion of Christ. Some charitable explanation of Dr. Reich's strange and (to "higher critics" and their friends) offensive language is certainly required. And if the former theory is too unnatural, considering his freedom on the "Virgin Birth," then one may suppose that, having a sympathetic nature, he cannot help putting himself in the place of a large section of his imagined readers, and writing sometimes in their character rather than in his own. In either case, I appeal to those who aim at a reasonable. which is not the same as a rationalistic. religion, not to attach any weight to Dr. Reich's gratuitous accusations. Let me not, however, be misunderstood. Speaking for at any rate a section of the "higher critics." I venture to say that it is (or ought to be) beyond question that the gaps in Jewish and early Christian tradition were filled up by the unconscious action of the imagination. I say "the unconscious action," because there is good reason to think that that faculty did not work in a void; but had at its disposal numerous deeply significant forms of expression and of statement which it instinctively adapted to its own purposes. These forms of expression and of statement came from regions outside Palestine, and it is no unsupported or arbitrary hypothesis that directly or indirectly they have a connection with Babylonia.

If to think thus is "to batter down the foundations of all that we (!) believe and hold most in reverence," and to represent Jewish tradition as "a mere flimsy plagiarism of Babylonian myths," then the discussion is at an end. No self-respecting scholar would condescend to argue with a writer who really believed this. But I hope better things of Dr. Reich. It is only a superficial impression to which he now gives utterance. Winckler's elaborate theories are evidently beyond him; he has not had time to master them. Delitzsch

he understands, but this great Assyrian scholar represents neither theology nor historical criticism. He knows Baur, bu' Baur was one of those who had the courage to make mistakes for the benefit of posterity. More recent investigators seem to be unknown to Dr. Reich, nor has he heard that a leading member of the school of comparative religion within the Christian Church has written a popular Life of Christ' which circulates by thousands in Germany, and is distinguished by its large recognition of the personality of Jesus.

Dr. Reich gently criticises Professor Sanday and the late Bishop Lightfoot, because, as he thinks, they did not adopt the right method in answering the book called Supernatural Religion. Bishop Lightfoot, however, naturally took up that side of criticism in which he was strongest, and Professor Sanday reserved his full defence of the essential part of the Gospel story for a better occasion. I am sure that before very long the English-speaking theological world will become aware of the latter scholar's deep study of the personality of Jesus, a study which, as Dr. Reich rightly points out, is the most effective answer to really destructive criticism. I venture to reckon Professor Sanday as a "higher critic," and as such I defend him, not less than Professor Driver, against the assault of Dr. Emil Reich, without of course implying that his particular school is the only one which has a right of existence and a claim to the gratitude of the community.

It is, however, the Old Testament with which our essayist is mainly concerned. He cannot abide Winckler, whom he wrongly takes as a representative "higher critic." He is more appreciative of Professor Fritz Hommel. whose "moderation and soberness" are contrasted with the "hyper-criticism" of other persons. Far be it from me to disparage Professor Hommel, who is as much a critic of words as any other well-furnished historical critic except, apparently, Dr. Reich, and who has the same eagerness and fertility of resource which we find in Winckler, and which are not usually described as "moderation and soberness." To this friendly scholar I am indebted for my acquaintance with the work which Dr. Reich (as I think) gratuitously represents as having dealt a death-blow to the unfounded pretensions of "higher criticism."

At my learned correspondent's suggestion I procured this book: it is called The Masai: Ethnographic Monograph on an East African Semitic People, by M. Merker.* It seems to be a work of considerable importance, and not least for students of religious traditions. The very meagre account of the Masai given by our own explorer, Joseph Thomson, in his Through Masai-land (second edition, 1885) is now altogether superseded. Captain Merker, who has spent some eight years in the Masai country, deserves the highest praise for the skill and intelligence with which he has collected his material. I need not repeat what Dr. Reich has said respecting him, and if I do not agree with all that this writer asserts, it will be understood that it is because I have the book before me and not only Dr. Reich's article. It is not, for instance, correct to say that the Masai are a negro-people. There has no doubt been some admixture of negro blood, but the people as a whole are, as we are told, anthropologically, a homogeneous Sem-

^{7&}quot; Jesus." Von Prof. D. Wilhelm Bousset (Halle, 1904). The series to which this bookle belongs is called "Religionsgeschichtliche Volksbücher für die deutsche christliche Gegenwart."

^{6&}quot; Die Masai. Ethnographische Monographie eines ostafrikanischen Semitenvolkes. Von M. Merker, Hauptmann and Kompanie-Chef in der Kaiserlichen Schutztruppe für Deutsch-Ostafrika." Berlin, 1904.

itic race (Luschan agrees with this). And while I am much impressed by the acuteness of Captain Merker's main suggestions, I deny that they affect the question as to the profitableness of "higher criticism." For the truth is that Captain Merker assumes the main results of "higher criticism." Dr. Reich, for his part, mocks at "the schools of Jehovists and Jahvists," and at the "layer upon layer of additions discovered, more especially in the Pentateuch;" Captain Merker refers to the documents discovered by the skill of the critics, and adapts his arguments to them.

Dr. Reich affirms that "it is just as possible, with purely philological arguments, to deduce the Masai legends from Hebrew stories as it is to deduce Hebrew legends from Babylonian myths." No person experienced in the comparative study of Hebrew and Babylonian stories would be so bold as to say this. The "philological" arguments of Winckler and Hommel seem to me often very precarious, but I am sure that neither of these scholars will accept many, if any, of the connections which Captain Merker proposes between the names in the legends of the Masai and those in the myths and legends either of the Israelites or of the Babylonians and (as Hommel would add) the Chaldeans. It is this impossibility of establishing a connection of the names which constitutes the weakness of Captain Merker's arguments. On the other hand, the contents of the legends of the Masai are of great interest, though they cannot vie with those of some other uncultured races, such as the Polynesians.

I am particularly struck with the opening legend. It states that at first

the earth was a stony desert in which the dragon Nenaunir dwelt alone. Then God came down and conquered the dragon, and fertilized the desert. On the spot where God had killed the monster arose the "kerio" or Paradise. This reminds us at once of the fountain near Joppa which was colored by the blood of the sea-monster slain by Perseus.9 but also of the blood of the Labbu 10 slain by Bel, which flowed for "three years, three months, a day, and [hours]." It is certainly plausible to suppose that this was the original conception of "the river which went out of Eden to water the garden" (Genesis ii. 10), just as in the original form of another story divine blood was mixed with the earth of which the first man was made.11

Very remarkable, too, is the story of the temptation of the first woman by the three-headed serpent, and the scene of the divine judgment; also of the great rain-storm, from which the pious Tumbainot escaped by making a box (a "hut of wood"), which he entered with his two wives, his six sons and their wives, taking animals of different kinds with them. I must say, however, that the story of the Decalogue, which greatly impresses both Captain Merker and Dr. Reich, does not seem to me specially interesting for comparative purposes.

Dr. Reich's assertion of the deadly blow struck by Captain Merker at "higher criticism" having been repelled, I have no right to occupy more space with a consideration of the Masai legends. I may, however, warn the "man in the street," to whom Dr. Reich appeals, not to be in a hurry to draw controversial inferences from the new disclosures. Blind inexperience is sure

Obertson Smith, "The Religion of the Semites," 2nd edition, p. 174; Jensen "Keilinschriftliche Bibliothek," vi., 47; Gunkel, "Schöpfung und Chaos," p. 29.

¹⁰ i. e. Tiamat, the lion-headed.

¹¹ The opening lines of the 6th Creation Tablet show that the God Marduk's own blood is meant (see King, "Creation Tablets"); Zimmern, "Zeitschrift für Assyriologie," vol. xiv.

to err in such matters. "Higher critics"-poor things!-have to trouble themselves about such legends, but they do not generally rush into print with their conclusions. If, however, it is most probable that these Masai legends in an earlier form did come from the common home of the Semites in Arabia, I know one of that despised band of critics whom the view would just suit. I should like, however, to hear what Eduard Stucken has to say about it. From his last work let me quote this memorable sentence, "There are Greenlandish and Polynesian legends which bring us nearer to the comprehension of a Biblical passage than the cognate Babylonian legends."13

What Dr. Reich tells us about the importance to the historian of considerations of geography or, as he would like to say, geo-politics, is excellent. But he is mistaken in thinking that such considerations are unknown, for instance, to Winckler, and generally held to have nothing to do with "philology." The expanded sense of this word enables and requires us to take within our range both Völkerpsychologie and "geo-politics." I accept Dr. Reich's reminder, and admit once more that Biblical philology is somewhat behind its classical sister. Elsewhere, too, I have sought to stir up my colleagues to follow the Assyriologists 18 more closely-i.e., to seek a more inward comprehension of Babylonian thought and belief. But I have also had to point

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out that this must be combined with a much more determined attempt to solve the problems of the Hebrew text. Even recent commentaries on the Old Testament fail on the whole to satisfy the requirements of a thorough critical student. I am far from asserting the "bankruptcy" of the prevalent methods of "higher criticism." But I do assert their inadequacy, and since this assertion has given great offence, and the endeavors which I have made to open promising paths of research have been received with hostility. I once more utter a protest against such partisanship, and ask fair-minded laymen not to let the opponents of this form of progress walk over the course, but to consider whether they cannot themselves exert some influence on these angry controversialists, and whether the offer of a compact of peace and mutual respect, lately made by myself, is not both necessary and fair.14 For the matter is one which affects laymen as well as critical workers. The educated public will gain greatly by coming into closer touch with investigators of the Bible, It will learn what things are really settled, and will come to understand the fascination of the many unsettled important historical problems. A sense of the love of truth, characteristic of the lay mind, will react upon the critical workers and make them more fearless, more resourceful, and less contented to rest in imperfectly defended positions.

T. K. Cheyne.

THE RED VIRGIN OF MONTMARTRE.

One evening, years ago now, there was a hand-to-hand fight in a certain well-known upper-room in Montmartre.

Some fifty men had met together for a friendly discussion; and, after giving to vain words a fair trial, were having

¹², "Beiträge sur orientalischen Mythologie" I., 1902, p. 2.

28 The term is unfortunate.

oughness of Investigation—addressed to Churchmen and Scholars "(Williams & Norgate, 1904).

¹⁴ See. "Bible Problems. A Plea for Thor-

recourse to blows. They were at one another's throats, and with a "no quarter" look in their eyes; broken chairs were flying about; daggers, too; and there was the unmistakable click of pistols. The sergeant de ville outside, when he heard the noise, hurried away with all speed, for he recognized some of the voices; and not for the grand cross of the Légion d'Honneur itself would he have entered that room.

itself, would he have entered that room. Just when the battle was at its height, when the very air was alive with the thud of blows and with curses, the door was opened softly, and a cry, "Mes enfants, mes enfants," rang through the room. The words sounded quite grotesquely incongruous; the voice, too, for it was refined, even cultured, and sweet as the note of a nightingale. Every man's hand fell at once by his side as if stricken; all noise ceased; there was the stillness of death around. Some of the worst scoundrels in Europe were there, great rough fellows of the sort dubbed dangerous, Ishmaels at war with society, at war with their kind. Yet, when they heard that voice their faces flushed nervously; they hung their heads as schoolboys detected in wrongdoing; and shrank away from the door in ignominious dis-There was hardly one among them who would not rather have faced the whole Paris police than that gaunt, black-robed woman, who was standing there looking at them with tears in her great dark eyes. For it was Louise Michel, the Red Virgin of Montmartre, the one woman whom they feared, they who feared neither God nor man, the one woman whom they reverenced. And for some of them it was quite a heart-breaking affair, that she should find them thus wasting their time fighting and quarrelling, when there were, as she reminded them plaintively, so many wrongs waiting to be righted, so many hungry children waiting to be fed.

The Spectator is not a journal too prone to charity, especially when dealing with such unruly subjects as Louise Michel; none the less it once described her as a "Sister of Mercy without uniform or vow." Sister of Mercy is a strange epithet to apply to the Red Virgin of Montmartre, to this woman who fought on barricades, and planned political murders; yet, strange though it seemed, it is singularly appropriate. Louise Michel was by nature emphatically a Sister of Mercy. She belonged to that little company of women to whom the sight of a hungry face is as a blow; to whom it is as physical torture to know that others are in pain. With her as with all of her kind, it was a matter of instinct to strive eagerly, passionately, to relieve suffering: she gave away all that she had to the poor-again and again she gave away the cloak from off her own back, the very shoes from off her own feet. "Had she lived in the middle ages she would certainly have founded a new religious order," Herr Zenker declares; and no one who knew her could doubt that she had in her the making of an ideal Little Sister of the Poor. Yes, of a St. Theresa, too. For not only was she, as some one once said of her, "l'abnégation et le dévouement incarnés"; but she had a soul all aglow with enthusiasm, with passionate love of nature as well as of humanity; she had, too, that little touch of genius which is so near akin to madness. She was a mystic, if ever there were one, although she boasted herself a materialist; in an age less prosaic than this she would undoubtedly-as some of the poetry she wrote clearly proves-have heard voices, seen visions. At the same time-for her character was the strangest of medleys-she was a perfect Viking in her love of a contest, a born fighter, the veriest knight errant. No cause was too hopeless for her to espouse it, no crusade too Quixotic for her to join its ranks. If she saw wrong being done, stand aside with folded hands she could not; she must try to right it, even though the only way be a "wild wrong way."

This is a dangerous touch in a woman's character, especially when, as in this case, the woman lacks totally that all-saving grace, a sense of humor: lacks, too, another sense equally precious, common-sense. Again and again in the course of her life Louise Michel went astray; she did deeds which no one can justify; made speeches for which no excuse can be found: but, whenever she did go astray, it was always her craving to help the helpless, to right the wrongs of those who had no other champion, that proved her will-o'-the-wisp. And it is this that rendered her such a notable character in this century of ours, and gave to her life so subtle a charm. In a world where selfishness is rampant she knew not the meaning of the word self.

If the riff-raff of the Continent swore by Louise Michel, sisters of charity loved her, and the poor of all degrees, royalist as anarchist, clerical as heathen, put in her their trust; for never was there a woman with so great a power of winning the sympathy of the most diverse personalities. She counted among her friends men and women of all classes, all parties, all temperaments: M. Clémenceau and the Duchess d'Uzès: Prince Kropotkin and Sara Bernhardt, nay, Henri Rochefort himself, although he, it is true, cherishes one sore grievance against her. "Louise Michel," he once complained, "finds excuses for everything, and for everyone." Even under Napoleon, préfets took trouble to keep her out of harm's way, although they vowed she ought to be sent to Cayenne; and the Rector of the Chaumont Académie, who certainly ought to have excommunicated her, gave her his blessing instead. When she was in prison, her jailors were all devoted to her—at St. Lazare they actually allowed her to turn their parlor into a charity bureau, and carry on there her work among the poor. In New Caledonia her fellow-prisoners, motley crew though they were, treated her with the tenderest respect the whole time she was there; while the Kanakas hung on her words as if she were inspired. To this day they speak of her with bated breath as Italian peasants speak of the Madonna.

By birth Louise Michel belonged to the landowner class, through her father, and the land-tilling, through her mother. She was illegitimate, a fact, however, which seems to have had no influence on her life; for her father's father installed her mother in his château, and treated her in all respects as his son's wife. This he did, as he was careful to explain, not through charity, but as an act of justice; and he, it must be remembered, knew all the circumstances of the case. mother was a quiet, gentle, sweet-tempered woman, a rustic beauty, with large blue eyes and golden hair. So pretty was she that some one who once saw her standing by her daughter, exclaimed: "Il n'est pas possible que ce vilain enfant soit à vous." The poor mother was terribly distressed at the remark, whereas it made Louise chuckle aloud with delight. "Je rends justice à ma laideur," she tells us in her Mémoires.

Her love for her mother was the grand passion of her life; the man did not exist to whom she ever gave a thought when her mother was in question. She idolized her; there was nothing she would not do for her—excepting abandon her work. She, who was truth itself, would tell the most abject lies to save her a moment's anxiety; she was so keenly alive to the suffering she entailed on her, so sorry for her, so sorry that she should have such an

unsatisfactory daughter as herself.
"Est-ce que nos mères à nous peuvent être heureuses?" she asks. "Nous n'apportons guère de bonheur à nos familles; et pourtant nous les aimons d'autant plus qu'elles souffrent d'avantage." What the loss of her mother meant for her, is shown clearly by a pathetic little remark she once made. "If people slander me now, what matter? There is no one to be wounded by it now. My mother is dead."

She passed her early days in Haute Marne, at her grandfather's château, Vroncourt, a fine old place though little better than a ruin. And very happy days they were, in spite of the fact that her family was becoming poorer and poorer from year to year. Even as a child she had an intense love of the beautiful, and she was in the midst of lovely scenery, within hail of a great forest. In this forest she and her cousin Jules spent most of their time, making friends with the wild creatures there, playing on strange musical instruments which they had made for themselves, reading, play-acting, chattering, arguing, quarrelling, nay, even invoking the devil from time to time. Her grandfather, who had undertaken to teach her himself, had views of his own on education, as on most other subjects. He was a clever man, a man of wide culture, cynical but kindly; in politics, a staunch Republican; in religion, a thorough-going old heathen, one whose only fetish was Voltaire. Not only did he let his grandchild run wild in the forest, but he turned her loose into his well-stored library, with the result that before long she could recite Racine and Molière by the hour together, and knew Victor Hugo by heart. She soon began to write poetry, too, lyrics, dramas, operas of all sorts and kinds, things, for the most part, of no great merit, it must be confessed, although one of her poems found favor in the eyes of Victor Hugo.

while she had developed a marked talent for music, as well as for mathematics, and a keen love of science.

One day, while she was still a child, Louise chanced to hear a peasant woman tell how she had had to stand by and see her little ones waste away, crying for food, one year when the crops had failed. It was a pitiable tale, a ghastly one, too, for there was a man in the village who had corn, and to spare; and the woman's husband, when two of the childen lay dead, had appealed to him for the loan of a few measures wherewith to save the others, and he had refused it. Whereupon, the peasant would have killed him had not his wife held him back.

This story drove Louise quite wild with indignation, and she overwhelmed the woman with reproaches. The man deserved to die, she told her, fiercely; she had no right to save his life. The peasant was shocked beyond measure at the child's view of the case; "Ca fait pleurer le bon Dieu," she declared; and preached her a sermon on the duty of submission. "Tout le monde ne peut pas manger pain tous les jours," she assured her. But Louise would have none of this teaching; her whole nature rose against it in revolt. The world must be strangely ajar, she felt, young as she was, if people must submit to being starved. And, as the fates would have it, just about this time Lamennais's "Paroles d'un Croyant" fell into her hands. The result was a foregone conclusion. She was seized with a pity for the poor which knew neither bound nor limit; and gave proof of it in an oddly characteristic fashion. poverty-stricken in the whole countryside began to make their way to the château, from time to time, and tender their thanks to its owner for gifts received. Then it came out that Louise had taken to stealing from her grandparents, and presenting what she stole

to the poor in their name. Her grandfather was infinitely amused at this new development on her part; still, as it entailed inconvenience, he proposed a compromise: if she would undertake to respect his possessions, he would give her a franc a week for her poor. After much weighing of pros and cons, however, she declined his offer; for, as she told him, she could steal more than that, she was sure.

In 1850-she was only fourteen at the time-her happy-go-lucky life at Vroncourt came to an end, for her grandfather died; and, as he had only some £400 to leave her, her family decided that she must be fitted to earn her own living. Already, at that time, she had received two offers, and to her grandfather's keen delight, had rejected them with scoffs and jeers, for matrimony never appealed to her taste. She had always had too many good brothers, she used to say, ever to wish for a husband. She was sent first to Lagny, and then to Chaumont, to be trained as a teacher; and in 1853 she passed the necessary examinations with flying colors. Then a difficulty arose; for, as she refused to take the oath of allegiance to Napoleon, it was impossible for her to obtain a post in a State school: and, as she was bent on having her mother to live with her, she would not enter a private school or family. She therefore decided to open a private school of her own, and this she did at Andeloncourt, a sleepy little country town.

Her undertaking, rash as it seemed, was from the first a great success; for, as even the country folk soon discovered, she had rare gifts as a teacher. I once met an old pupil of hers, an officer's daughter, one who, as she is in sympathy at once Clerical and Royalist, could hardly be expected to show-her much charity. To my surprise, however, she spoke of her with the greatest enthusiasm. "Louise

Michel is the only woman I ever knew who could teach," she told me. ing her lectures we used to sit just spellbound. Before she had been in the school a week we all idolized her; and when she was sent away, as she soon was, we cried our eyes out." She was sent away, it seems, because the mistress of the school found it quite impossible to keep her supplied with proper clothing. Every time she went out for a walk-it was in Paris, and in midwinter-she returned minus something, generally her cloak, which she had given away to someone or other who she thought looked cold.

Even at Andeloncourt her life was by no means plain sailing, for she soon became the veriest thorn in the flesh to those there in authority. Thanks to the influence of her aunt Victorine, she was at that time strongly tinged with religious enthusiasm-to her last day she confessed to a weakness for incense. Not only did she attend Mass regularly, but she joined with fervor in the hymns and Ave Marias. She always walked straight out of the church, however, and took her pupils with her, the moment the priest began "Domine salvum fac Napoleonem"; for pray for the Emperor she would not. Twice every day too, morning and evening, the "Marseillaise" was sung in her schoolroom, in open defiance of police warnings and threats. Little wonder she was denounced as a Republican, and summoned to appear before the Rector of Chaumont. Off she went at once on the chance of making the Rector understand the whys and wherefores of her erratic proceedings; and make him understand them she evidently did, for he and she parted the best of friends, and neither then nor later could he ever be induced to order her school to be closed.

Then she turned her hand to journalism, and published in a local newspaper a fierce attack on Domitian.

This brought her, of course, into collision with the Préfet; for, as the blindest could see, Domitian was but another name for Napoleon. She had insulted the Emperor, the Préfet told her: whereupon she retorted that it was not she, but he, who had insulted him; for what greater insult could be offered to his sovereign than to profess to recognize him in this picture of the infamous Domitian, "Not but that he'is Domitian," she hastened to add, with sublime naïveté. When the Préfet told her that she deserved to be sent to Cayenne, she assured him she only wished she could be, as it was her great desire to open a school there, and she had not the money wherewith to pay her passage. How the poor man must have rejoiced when at length, after a twelve years' sojourn in his domain, she betook herself to Paris, where, in 1866, she obtained an appointment as assistant teacher in the school of a Mme. Vollier, who lived in Montmartre. Her reason for leaving Andeloncourt was the impossibility of earning there an income large enough to provide her mother with the comforts she desired for her.

In Paris, Mdlle. Michel threw herself at once heart and soul into the various intellectual and social movements of the day. She was seized with a perfect passion for learning. The moment her work with her pupils was over, she would hurry away to Rue Hautefeuille, where there was then a sort of free university. There she studied mathematics, physics, chemistry, and law, and startled her professors by the progress she made. Then, before she had been there many months, she was in close touch with the poor of her Quartier, teaching in their night schools, visiting among them, and trying to devise means of bettering their lot. Meanwhile she revelled in concerts, theatres, and operas, even though every ticket she bought meant a day without

a dinner; she reveiled, too, in the many new friendships she made, and in the many fresh interests she gained in life. She had quite a delightful time, indeed, in those early years in Paris, although she was working night and day and on short commons, for she was always in want of money. From a financial point of view she had, as she soon discovered, made a mistake in going to Paris. Even when she had become Mme. Vollier's partner, she was no better off than before.

At first she was too keenly interested in her social and literary work to meddle much in politics; but that, sooner or later, she should be drawn into the vortex, was of course inevitable. For Paris was seething with discontent in those days; the Court was recklessly extravagant; society, more ostentatiously luxurious than ever beforeeven decency was openly flaunted; and the poor were becoming poorer and poorer. Evil was rife in the land, in fact, and Louise had been brought up to regard sovereigns as the source of all evil. That the Emperor was personally responsible for the sufferings of the luckless among his subjects, she had no doubt whatever; in her eyes, indeed, not only was he the evil genius of France, but the arch-enemy of the human race. Still, up to the time of the Noir episode, she seems to have had no thought of entering the lists against him. In 1870, Victor Noir, a journalist, was deliberately murdered by Prince Victor Bonaparte, and the crime was practically condoned by the Emperor.

This affair impressed Mdlle. Michel most painfully. That France should tolerate a ruler capable of such an act seemed to her a proof that the whole nation was demoralized, that this Bonaparte had enthralled the race, robbed them of their sense of right and wrong. So long as he held sway there was no hope for them; they would sink lower and lower; this was the thought

that drove her mad. Here was a wrong to be righted, and to her overwrought brain, all aglow with morbid fancies, it seemed that the only way it could be righted was the old wild, wrong way. Visions of Jael and Charlotte Corday began to haunt her, while ringing in her ears the whole day long were Victor Hugo's words:—

Harmodius, c'est l'heure, Tu peux frapper cet homme avec tranquillité.

And the end of it was she induced a friend to apply for her to the Emperor for an audience. It was granted; but, fortunately for her, before the appointed day arrived, war was declared, and Napoleon had left Paris never to return.

During the siege Louise Michel played a leading rôle, working as no other woman could, perhaps, have workednursing the wounded, foraging for the hungry, and taking her turn on the barricades from time to time. Never was there a mortal more fearless. She was found one day on the barricades reading Baudelaire as she drank her coffee, although bullets were falling around her as hailstones. Another day she was seen to walk some three hundred yards in the full line of fire for the sake of rescuing a cat. And when her friends remonstrated she was quite surprised: she had calculated carefully the chances of being shot, she said. and found that they were too small to be worth considering.

Her great wish was that all who were in the city should throw in their lot together, and go share and share alike so far, at least, as food was concerned. And when she found that the rich would have none of this arrangement, she, in sore wrath, organized foraging parties that went about from house to house, collecting for the public use whatever provisions they could find. One of these parties, after levy-

ing toll on the house of a rich banker. made their way to an upper story, where they found a poor old lady sitting all alone. She was an aristocrat, as they could see at a glance, one. though, of the poverty-stricken class, as they ought to have seen but did not, so neatly was her old silk gown patched and darned. When, therefore, she said she had nothing to surrender. had no food, indeed, for herself, they scoffed, of course; and one of them, a great rough woman, seized her by the arm, whereupon in her fear she uttered a piteous little cry, and, burying her face in her hands, she burst into tears. At that moment, she said-I have heard her tell the story-someone rushed into the room like a whirlwind and drove out the intruders, overwhelming them with reproaches the while, telling them they were "bêtes," nay, worse. the same someone-it was Louise, of course-knelt down by her side, and taking her hands tenderly, strove to soothe and comfort her. And so long as the siege lasted, she took care that the old lady had her full share of whatever food there was to be had.

Although in later days Mdlle. Michel boasted herself a cosmopolitan, at the time when her country was in danger she was an ardent patriot; and so long as she believed that those in authority were patriots too, her strongest desire was to help them. It was not until she had lost her faith in them, had come to look on them as men capable of surrendering Paris to the enemy through cowardice, if not through treason, that she joined in organizing that famous Comité de Vigilance, which proved such a thorn in their side. The special task this Comité set itself to do, was to force the Government to put far from them all thought of yielding, force them to send out sorties, force them to fight a fight to the death, in fact. hard task it was, for the Government were not of the stuff of which heroes

are made; and at the very time when they were shaking the heavens with their protestations that they would rather die than surrender, they were secretly trafficking with the enemy. As Louise learnt to know these men-their narrow selfishness, their ineptitude, their indifference to the honor of their country-her indignation against them became boundless. It was her experiences, indeed, in these terrible days, when the rulers of France showed at every turn that they were more afraid of Frenchmen than of Germans, that convinced her a country was better without rulers than with them-that made her an anarchist, in fact. She was heart and soul with the Communists, strongly as she condemned some of their doings-the shooting of the hostages, for one; and when the Versaillists forced their way into Paris, she fought against them with a bravery that won the admiration even of her foes. Then, when the battle was lost, she could, if she but would, have made her escape easily; for she had among all parties friends who would gladly have given her a helping hand. But she turned a deaf ear to their persuasions, and went quietly home, where a terrible shock awaited her; for she found that her mother had just been arrested. Without a thought of her own danger, she hurried after her, and, by surrendering herself prisoner, procured the poor old lady's release.

An oddly characteristic little episode then occurred. She asked the officer in charge of the prisoners to let her take her mother home, promising that, if he would, she would come straight back to prison. He did allow her, and she did come straight back, although she knew she was coming to almost certain death—a Communist's chance of mercy was practically nil. There was both surprise and regret on the officer's face when he saw her return;

he had hoped, as he frankly confessed, that she would break her promise.

She was taken to Satory, where she saw, as she tells us in her Mémoires, hundreds of worthy bourgeois shot down by mistake-the deaf and dumb slaughtered for crying "Vive la Commune," the paralyzed, for building barricades. For the Versailles soldiers had lost their heads completely, and cared not one whit, so long as they could kill, whether those whom they killed were innocent or guilty. That they did not kill Louise is little short of a miracle, for she certainly did her best to provoke them. "J'étais insolente comme on l'est dans la défaite avec les vainqueurs féroces," she remarks, and with perfect truth. When Théophile Ferré, her greatest friend, was shothis own mother betrayed him to the police to save her daughter, and then went mad-she wrote to General Appert that he would do well to have her shot too; as, if she ever left prison alive, she would certainly avenge her dead comrades. And when on her trial, she called out to her judges, in the open court: "Si vous n'êtes pas des lâches, tuez-moi." But this is just what they could not find it in their hearts to do. She was condemned to transportation for life.

Had it not been for the thought of her mother, she would have thoroughly enjoyed her voyage to New Caledonia, for she was, as she tells us herself, "plus à demi sauvage" in her intense love of the sea. She was soon on the best of terms not only with her fellowprisoners, but with the captain, the sailors, all on board, in fact, but especially with the Sisters of Charity, her gaolers, whose hearts she speedily won. Among the prisoners was Henri de Rochefort, who, in his Reminiscences, indulges in much merriment at the expense of her Quixotic ways. "Look at the pretty wedding trousseau Mac-Mahon has sent me," she called out to

him one day, holding up the clothes provided by the Government for her, as for the other female prisoners. She refused them on the ground that it was not her custom to accept presents from The result was that, her enemies. when the cold region was reached, and everything was frozen, she was walking about bare-foot. The captain, who was in great distress on her account, took some warm shoes to M. Rochefort and begged him to give them to her. "If I offer them, she will refuse them point blank," he said. From M. Rochefort she accepted the present with many thanks. Three days later, however, she was again walking about bare-foot: she had given away her shoes to some one who, she was sure, felt the cold more than she did.

Mdlle. Michel spent eight years in New Caledonia, years full of keen interests and hard work. Within a week of her landing she had already organized a school, and was holding classes for all sorts and conditions. Later she organized a special school for Kanakas -one in which algebra was taught before arithmetic, owing to some peculiarity in the Kanaka brain-and threw herself with passionate zeal into the task of civilizing them. They rallied around her with the most touching devotion; there was nothing they would not do for her. So great, indeed, was her influence among them, that the officials viewed it with anxiety. Meanwhile she was trying some curious experiments, vaccinating trees, for one, and that years before the Koch theory had been heard of. Then she hunted up an old piano, and gave musical entertainments. She strove to provide recreation for her fellow-prisoners, many of whom were dying of ennui; she strove, too, to help them in other ways-to shield them from the petty tyranny of the officials; and, above all, to enable them to make both ends meet financially. She even tried to play the

conspirator for their sake, a rôle for which she was just about as well fitted as she was for flying. She devised a plot to escape to Sydney, and there persuade some English captain to take his ship to Noumea, embark the political prisoners, and sail away with them to some free land or other. The scheme failed, of course, and all because, as she maintained, an obstinate old sailor refused to let her have his boat in which to escape one day when a terrible storm was raging.

At length, in 1880, an amnesty was granted, and Louise hastened back to France, for she had just heard that her mother was ill. She travelled by way of London; where she was much touched by the cordial reception she met with-as her train steamed into Victoria the "Marseillaise" was sung. When she stepped out of the carriage, she was seen to be carrying with infinite care something under her long black cloak; and this was enough, of course, to cause great excitement among the French detectives, whose thoughts turn to dynamite, as ducks to water. The "something," however, proved to be only five much be-battered old cats, which she had brought to Europe with her, because they were so ugly that she was afraid no one would care for them if she left them behind.

In Paris she was treated at first with the greatest consideration, even by her political opponents; she was invited to give evidence with regard to the Kanakas before a Parliamentary Commission; her portrait in the salon was one of the pictures of the year; and to hear her lecture was quite the fashion. She travelled through France and Belgium, giving addresses, and then came to London, where, to her surprise and delight, as she naïvely confesses, all the newspapers, "même l'aristocratique Pall Mall Gazette," treated her with "une courtoisie parfaite." "Les journaux anglais, même

les plus réactionnaires," she tells us, "rendirent compte avec une grande impartialité de mes conférences."

As time passed, however, the French Government began to look on her askance; and little wonder, for she denounced them and their doings in a strain that would have ruffled the temper of even the least susceptible. They were not one whit better, she told them roundly, than Napoleon's ministers had been; there was no more liberty, no more equality, under the Republic, than there had been under the Empire; and, as for fraternity, the term had become a byword. What stirred up her wrath against them most of all was their neglect of the poor. It was a time of great distress; Paris was crowded with unemployed: women, and children were going about with hungry faces; and when she appealed for help on their behalf, she was told that the feeding of beggars was no concern of the Government. Her reply was to organize a demonstration in the hope of arousing the rich to a sense of their duty to the poor. At the head of a crowd of half-starved children. she marched through the streets of Paris, carrying a black flag in her For this she was brought to trial on a charge of inciting to violence and robbery. Some of the children, it seems, had entered a baker's shop and stolen some loaves, or, as they always averred, had had some loaves given to them. M. Quesnay de Beaurepaire, who was at that time Avocat-Général, depicted her, of course, as a most dangerous character, a stirrer-up of sedition, the sworn foe not only of law and order, but of property; and so skilfully did he play on bourgeois fears that she was condemned to six years' imprisonment. Six years' imprisonment for a proceeding which, although certainly most indiscreet, was at worst a misdemeanor, not a crime! In England, in the circumstances, the sentence might have been fourteen days' imprisonment, though probably it would have been only a fine.

The French Government had soon good reason to regret the severity with which Mdlle. Michel was treated; for, if when at liberty she had been an annoyance to them, in prison she was a source of danger, as her name served as a rallying cry for all who wished to attack them. For peace sake they would no doubt have released her gladly if she would have appealed to them, but this nothing would induce her to do; although, when she heard there was cholera in Paris, she did ask to be allowed to go to nurse the sufferers. In 1885, however, her mother was taken ill, and then she availed herself gratefully of the permission to go to her; and although a prison official was sent with her, he proved a help rather than a hindrance, as he installed himself as assistant nurse, and did all the fetching and carrying. When the end came, she was broken-hearted; so terrible indeed was her grief that her friends feared for her life. Thanks to M. Rochefort, the funeral was made the occasion of a great political demonstration; but she was not there to witness it, as the very day her mother died she insisted on returning to prison. She did not stay there long, however, as the Government, at the suggestion of M. Waldeck-Rousseau, ordered her release, whereupon her gaolers had practically to turn her out, as she refused to go unless she might take with her all the other political prisoners.

When Mdlle. Michel left prison she was for a time a changed woman; her mother's death seemed to have robbed her of all her old joic de vivre; and although in her dealings with the poor she was as gentle and pitiful as ever, in her attacks on the rich she waxed at once more violent and more bitter. She was broken in health, and not only sorely troubled but overwrought; and

unfortunately agents-provocateurs were very busy around her just then. The result was she made speeches at-Lyons and elsewhere which no Government could be expected to tolerate. She was arrested, and sent, not to prison, but to a lunatic asylum. Four days later, however, she was released by M. Constant, as no doctor would pronounce her insane. She then came to London, a town for which she had long cherished a special affection. "Eh, bien, oui, j'aime Londres," she writes, "Londres, où la vieille Angleterre est encore plus libéral à l'ombre des potences que ne le sont des bourgeois soi-disant Républicains." In her infinite charity towards things English, she even lavished praise on workhouses.

After a time she opened a school for The Fortnightly Review.

the foreign waifs and strays in Lon-'don; and, depending the while for her own daily bread on her writings, carried on almost to the end a very useful work among them, trying not only to teach them, but to civilize them, and put them in the way of earning their own living. To the day of her death she was just as eager as ever to give away all that she had, just as bent on bearing the burdens of others; for she had lost none of her old devoted love of the poor, none of her passionate craving to help them. She was an anarchist, of course; a heathen, too-so at least the world says; none the less, were the Sermon on the Mount the rule of life, a claim for her to rank as saint might not, perhaps, be altogether beyond argument.

Edith Sellers.

MOLE-WARFARE.

I.

At last, after days of work, the excavation has been done. The actual tunnel,—the mine-gallery—is but a replica, life-size, of the mine-chart kept with such precautions and jealous care by the Lieutenant-Colonel of Engineers, in his little straw shanty down in the lodgement whence the gallery started. This chart is plotted out on a large-scale parchment map of the fort in front, dog's-eared and dirty because it was made by a Japanese Engineer officer, when working, before the war, as a coolie on this very defence work.

Degree for degree, foot for foot, with the help of theodolite, level, and plumb-bob, has the gallery followed its miniature prototype on the greasy parchment. If plumb-bob and measure, level and theodolite have not lied, the desired point underneath the main parapet of Fort —shan has been reached.

The chambers excavated at right angles to contain the explosive were cut, as soon as the main gallery was estimated to have crossed below the deep ditch and to be well beneath the great parapet of the fort, the object to be blown up.

Into these chambers tons and tons of dynamite have been carefully carried and closely packed. The men, who have stood for hours along the gallery, passing the cases from one to the other like water-buckets at a fire, have now trooped out. The means of firing the charge have been put into position and connected. The charge is sealed up by the mass of rock, shale, and earth which has been placed for some fifty yards back in the gallery as "tamping." This has been done to cork up the mine, so as to prevent the force of the explosion being dispersed down the gallery, as a blank charge in the barrel of a gun. The ceaseless scurry to and fro of the mining trucks has ended,—those little trucks which have run forwards empty and back again full, their badly greased wheels often shrieking a horror-struck protest at their task, and the mole-like miners have come up from underground. After days of burrowing they are now entirely brown, clothes, hands, faces, and hair full of crumbs of soil.

As usual no chances have been taken. As far as possible, in every case, the means of firing the charge have been duplicated. Firstly, there is electricity: for this there are two entirely separate circuits, each connected to its own set of detonators in the charge. To prevent possible damage from clumsy foot or falling stone the wires have been carried in split bamboos along the gal-The circuits have been tested several times, and each time the little kick of the galvanometer-needle has shown that there was no break in the line. Besides the electricity there is the ordinary fuse, also in duplicate. Each is made up of three different links in the chain of ignition; the detonators in the charge, the length of instantaneousfuse from them to a point some yards outside the tamping, and lastly the short piece of slow burning safetyfuse joined on,-safety-fuse, in order to allow time for escape to the person igniting the charge. Weak spots in the train of fire always are these joints. difficult to make, and easily deranged by a jerk or a falling stone. The fuses, however, are after all only a second string; much neater, cleaner, quicker and more certain is the electric current.

Far away, at varying distances, lie the guns, every one already laid on the doomed fort. Some will fire direct, some from behind hills, whence one cannot see the target.

So soon as the smoke of the explosion shoots up, and mushroom-like spreads into the sky, all will concentrate their fire on this work. A veritable squall of bursting steel and shrapnel bullets will it be, and under its cover the assaulting columns will storm the breach.

The stormers are now ready, crouching under cover in the different lodgements and parallels closest to the work. They are waiting the moment to charge forward on the bewildered and shaken survivors of the explosion, who will be subjected simultaneously to this inferno of artillery fire.

All is ready, but not a moment too soon, for have not the listeners, lying prone in their branch listening-galleries, heard coming from somewhere in the womb of Mother Earth thud thud,-the strokes of the Russians countermining? Has not the pebble placed on the manycolored captured Russian drum danced to the same vibrations? Hard it is to locate, harder still to estimate their distance; but without doubt they are working, working near at hand too. Even now they may have burrowed right up to the charge, and be busy in cutting the electric leads and fuses, Dynamite, luckily, cannot be drowned out by water.

Far down the hill-side is the lodgement, that hole which looks like a distorted volcanic crater. Such, in fact, it is, being the result of exploding a few small mines, so spaced that their resulting craters intersect, and by overlapping form one elongated pit, a broad and very deep trench. The soil vomited up by the explosion has formed a parapet all round as it fell back. It was when the attackers found that they could advance no closer over the open, that this pit was made. A tunnel had been made up to its position,-this was the commencement of the mole's work,-and the mines exploded. At once, even while the sky was still raining rocks and clods of earth, the Sappers and Infantry advanced with a cat-like rush from the

parallel behind and seized this point of vantage. Without delay they started with pick and shovel to improve on the work of the explosives. Cat-like too, with tooth and nail have they hung on to their newly won position against all counter attacks. In vain have the desperate Russians surpassed themselves in their mighty attempts to try and turn out the Japanese by bayonet, bomb, or bullet. A foothold once established, the men of Nippon have hung on to the spot, steadily strengthening it the while.

From this lodgement was started the gallery for the great mine that is just about to be exploded and is to give them a road into the fortress, and it is here that all interest is now centred.

Down at the bottom of the hollow is a small group intently waiting. At the telephone in the straw shanty kneels the operator. Over the top of the parapet, above which bullets and shells sing their way, peers the Lieutenant-Colonel. Close by, in charge of a heavily-built Sergeant, lies a curious innocent-looking box with a handle; it is the dynamo-exploder. Near it two men are standing, each holding one end of an electric wire in either hand. The ends of these wires, where the metal protruding from its black insulation is scraped bright, give four points of light in the picture.

The telephone orderly speaks; the Colonel gives an order. Quickly and silently the two ends of wire held by one man are placed in the clamps of the dynamo, which are screwed down to grip them. The moment is fateful, and dead silence reigns among the little group, whose drawn and dirty faces wear if possible a more anxious expression than usual. The orderly speaks again. The Colonel turns to the Sergeant,—"Fire!"

Prrr_t,—the Sergeant throws his whole weight on the handle, forcing it down with a purring rattle, while all

involuntarily cower down, holding their breath. . . .

Nothing happens!

Again,—once more is the handle jerked up and forced down. Nothing happens! The man holding the second circuit steps forward, and the exploder is quickly connected to it. Once, twice, three times does the handle purr as it is forced down, by two men now.

Again,-nothing!

"Who connected this charge?".

Captain Yamatogo of the Imperial Japanese Engineers steps forward and salutes; a small saturnine-looking man. so coated with dried sweat and earth that he might again be well taken for the coolie. He is responsible: he was in charge; but, he happens to be the one chosen among many volunteers to go down and light the fuse, if necessary, and to go down and relight it, should it not act the first time. The matter of the failure of the electricity can wait till later. A word, and he turns round, picks up a small portable electric lamp which he straps round his forehead, and slings a thick coil of safety-fuse over his shoulder. A salute, and he has gone down the gallery, picking his way carefully. There is for the moment no danger, for no fuse has been lit and none can therefore smoulder to flame up again suddenly.

As he strides along, his thoughts run over the possible causes of failure. He ponders over a dull boom which he fancied he had heard proceed from the direction of the tunnel some five minutes ago, just before they connected with the dynamo. No one else had noticed it, apparently, amid the storm of noise. He had decided that his ears must be playing him tricks, for he had done much under ground listening recently, and they were strained; but now, down there alone, his thoughts again revert to this sound.

After walking for some two minutes, he almost stumbles into an obstruction;

the left side of the gallery and seemingly the top have fallen in. It is in a soft portion of the tunnel lined with timbers, which are splintered and lying all about. He hastily searches the side walls for a gauge mark showing the distance from the mouth. He finds one; he is twenty yards short of the tamping, and therefore the pile of soil and rock is just over the ends of the safety-fuse. Whilst standing there he hears strokes and voices,—voices close to him. He half draws his sword and waits.

This explains the failure. His ears were right. The enemy have driven forward a tube and exploded a small counter-mine, smashing in the side of the gallery. Well, they seem to have succeeded in spoiling the attackers' plan, for the present at any rate. It will be impossible to dig these tons of earth off the fuses under some hours; the gallery is completely blocked. But stay,-is it? He sees a small black patch of darkness on the right-hand top corner of the mound. Scrambling up, he digs with his hands, and finds a mere crust of earth. Behind this the opening is just large enough to crawl through. He wiggles along on his belly between the earth and the roof for some ten yards, then the mound slopes away and he stumbles down on to the floor again in the small space between the obstruction and the tamping at the end of the tunnel. He darts to the side of the tunnel and picks up two red ropes. These are the instantaneous-fuses. Captain Yamatogo knows all that is to be known about fuses; he knows that to light the instantaneous-fuse means death, as the flame would flash straight down to the charge before he could move. Not wanting to die uselessly, he heaves at the fuses to try and pull them and the pieces of safety-fuse joined to their ends, from under the load of earth. He pulls, but they do not yield; dropping them, he whips out his knife. He will cut the instantaneous-fuse and splice on a longish piece of safety-fuse, long enough to allow him to get back over the obstruction after lighting. Two minutes' work will do it.

At that moment he again hears a voice, still closer than before. There is no time to lose, not even two minutes; he can even hear that it is a Russian voice. Quickly he makes up his mind. but, his resolve taken, he proceeds calmly. Taking out a little Japanese flag, he sticks it into the earth beside him, and squats down on his heels, peels the end of the cut fuse, and then fills his pipe with tobacco. As he does this, he cannot help recalling with a grim smile that it must be just above where he now squats that he was kicked, as a coolie, by a Russian officer. He then thinks of his wife at home near Osaka, and his two merry-eyed little boys. Still thinking of them he measures, and sees that only one end of the fuse will go into his diminutive pipe-bowl at a time.

He lights the pipe, and takes a long pull. Expelling the smoke with a hoarse cry of *Banzai*, he presses the end of the fuse hard into the little glowing bowl. There is a hiss and a jet of sparks.

To those watching, great Fujiyama itself seems to erupt skywards from the Fort of —shan. Within two minutes the men of his company are running and stumbling above what was once Captain Yamatogo of the Imperial Japanese Engineers.

II.

Now it's all over, if you wish to see what was the Fort of ——shan, come along with me up to what looks like a collection of rubbish heaps over on the top of yonder hill.

You will see the Abomination of Desolation.

Inside what was the fort, the surface of rock and of earth, on level and on slope, is gashed and pitted into mounds and holes, the craters of the exploding eleven-inch shells. These monstrous projectiles have rained on the place until the defenders must have felt like the doomed dwellers in the Cities of the Plain.

Down below, where surfaces of broken concrete appear in patches of gray among the rock, were once the mouths of the bomb-proof casemates wherein the tortured garrison sought refuge from the hail of falling steel, vaulted casemates cut into the solid rock or roofed over with concrete where the rock gave place to softer material. Well have they done their duty even against the eleven-inch shell, until the end came. Now, some of the openings facing the rear or gorge of the fortress are sealed to the top with fallen earth and pulverized rock, some are only partially closed by the landslide from the parapet over them, their cracked arches still standing. With a sickening feeling thought turns to the men within them at the moment of the cataclysm, possibly snatching a few moments' rest, the majority, in all probability, sick or wounded. All round above stretches in a broken line the shapeless mass of the huge main parapet, and just inside this, there are remains of the concrete revetment wall which supported the interior of the parapet-the gun platforms and emplacements. This wall, which, in its former ordered neatness, almost suggested the idea of a battle-ship in concrete, with its searchlight emplacements, steps, davits and tackle for hoisting shell, and the regularly spaced little doors for the shelters, range-dials, ammunition-recesses and cartridgestores, now bulges this way and that, here cracked, there fallen with the unsupported earth flowing over it. Along one face, which was the front of the fortress, the only traces of it now to be seen are occasional corners appearing from the mound of loose earth and rock.

One cannot walk straight; it is necessary to avoid the boulders which lie scattered over the ground, or the shellcraters which honeycomb it. There a huge transverse, which is evidently of softer earth, still stands, a shapeless mound, its face all pock-marked with craters till it looks almost like a gigantic sponge. There are bodies everywhere; some lying on the surface, in the free air of Heaven; some buried, so that a hand or a foot alone discloses what is below. Everywhere also are splintered timber, rifles, cartridgeboxes, belts, coats, and all the usual débris of a battle-field, with a huge gun overturned or pointing dumbly to the sky to emphasize that this has been no common battle-field but the fight for a fortress. There is blood too .- but not much, thanks to the merciful dust, which has softly descended in an impalpable mist and covered everything with a gray-brown pall, giving to all a mysterious velvety appearance. It has soaked up the blood, an occasional dark spot being all that is to be seen.

Beyond the huge mound of the parapet, down, deep down, except on one side, still exists the ditch. Some forty feet in depth, it ran like a huge chasm round the whole fortress, in places hewn out of the solid rock, with almost sheer sides. At the angles or corners where the ditch bends are jumbled heaps of concrete, steel beams, and roughly squared stones. They are what remain of the caponieres, those little bomb-proof buildings built so snugly out of the way of shells right down at the bottom, whence machineguns and quick-firers poured their devasting blight of bullets, along the cruel wire entanglements, in which had

been caught the unsuccessful Japanese storming parties. Until these caponieres were silenced or destroyed no soul could live in that veritable chasm of death. All those gray little bodies hanging limp like broken marionettes along the length of the ditch, in the thicket of barbed wire, or lying doubled up and impaled on the stakes of the trous de loup, bear witness to the successful part these caponieres had played. The attitudes of some of the dead, who, hanging contorted, still grip a wire convulsively, give evidence of the power of the dynamo above. One of those heaps of dust and débris we saw in the casemates now represents the dynamo. Gaps here and there in the maze of wire, with its springy strands all curling up above holes in the ground, show where the contact mines of the defenders burst, or where the hand-grenades of both sides fell and exploded.

On one side there is no ditch; parapet and ditch seem to have been melted together by an earthquake. Here the mines were sprung. Escarp and count-

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erscarp have crumbled away, and the beetling parapet has slid down and filled up the ditch till the earth and rock has overflowed right on to the glacis beyond. There is no such large crater formed by the explosion as one would have expected, for it has been partially filled up by the mass falling in from all sides. The edge of what was the crater is marked by cracks and fissures, in places more than a foot wide, in the still standing parapet on either side. The dust gives to everything a soft rounded appearance.

Looking over the glacis, for some hundreds of yards the landscape is seen to be dotted with stones and fragments of rock, till it gives the impression of the South African veldt with its anthills. Further off, that mound shows the lodgement from which the Japanese moles started the last tunnel.

A sickening smell pervades the air.

A Japanese sentry stands motionless against the skyline under an improvised flagstaff. The only sign of life is the feeble flicker of the red and white flag in the almost still air.

Trout.

THE BLACK VENGEANCE.

It was dusk when I returned to the village that I had not seen for so many years—for more than half the span of a man's life. My arrangement with old Margot was that the little postern should be open at midnight. The castle was about an hour's walk from the village, by the high road that is to say, for it was really quite near, but the road was steep and winding.

I had been a free man just a week, and the first raptures of the open air and the unwalled plain were beginning to lose something of their intensity. Even the great thought of my vengeance now so close at hand could no longer mask my weariness and hunger. Nature will not be balked. The forty years that I had been caged like a captive beast had left me an old man.

In this there was at any rate one advantage. I had no fear of being recognized. In the village street many things were changed, but the little inn at the cross-roads was still there. I walked in boldly and sat down by the window. There were two or three peasants drinking, but they took little heed of me. I was in luck's way. The landlord was just going to have his supper, and he willingly spared me a plateful of steaming stew, which was to me like the elixir of life.

When I had finished I did what

might have cost me dear. I leaned back in my chair, stretched out my tired legs on the rail beneath the benchtable, and fell into a heavy sleep, such a slumber as no man should yield himself to who has any business on hand. Almost immediately, it seemed to me, I was awakened by the weight of a hand on my shoulder. I sprang up instantly, and found my host looking somewhat narrowly at me.

"Come," he said, "we are early folk here, and I am closing the house. If you will, you can stay the night, or if not you can pay for your supper and go."

I paid the reckoning, and asked him if he knew the hour.

"Well on to eleven," he answered, "for 'tis more than half an hour since the King's mail went by."

I bade him good-night and went forth into the deserted street.

The powers of darkness and silence were upon me and a certain awe of myself. Put it how you will, there is something dread in a purpose held to, through forty years of heart-beats. A wonderful thing is faith. Even in my dungeon, encompassed by those monstrous, slimy blocks of stone, with the stench of the moat ever in my nostrils, I never doubted that my hour—and his—would come. And now everything was moving to the appointed end as smoothly as if it had been rehearsed a thousand times.

I had left the last cottage behind me, and the shadow of the tall poplars lay black upon the road. Already I was skirting the castle grounds, and it would have been no great task to scale the wall and shorten my walk by a good half-hour. But I remembered the tales I had heard in my boyhood, and I knew the grounds were set with springs and snares, to say nothing of the wolf-hounds which my lord held far dearer than a peasant's life.

The moon had risen high-a threequarter moon, wonderfully bright and clear. There was not a breath of wind. vet the air was fresh and sweet with the delicate scents of leaf and flower. As I came out from the shadows of the trees into a piece of open road it seemed almost as light as day, only there was something about the scene strange and solemn. Then suddenly, at a turn of the road the castle came into view, heavy and threatening, every window black save one on an upper floor, whence there streamed a light that looked yellow and belated in the world of cold, pure moonshine.

At the first sight of that house of black memories my pulse began to beat faster and involuntarily my steps quickened. Also my hand went of its own accord to my bosom to feel for something that always nestled there—something cold, keen-edged, and pointed like a needle.

It seemed only a few minutes had passed before I stood in front of the great iron gates. This was not the chief entrance, and the lodge here was empty. But to my astonishment the gate itself stood a little open, and when I pushed, it yielded, so that without any let I entered an avenue which led to the broad walk that ran to the foot of the great terrace in front of the castle.

Forty-one years before, I had come up this very path, a mere boy, to claim my bride, and had found her dead—slain by her own hand, they fold me, and indeed it was like enough. One glance at her face and I knew the story. Then, unarmed as I was, I had gone to seek my lord. He was no coward—that I will say for him—yet when he saw me he trembled. There were others with him, but I saw them not, I remembered afterwards. I went straight to him and seized him by the throat. He stabbed me again and again, but I held on. Had we two been

alone, it had been life for life. But time, and for a time I went to my dungeon.

When I reached the broad walk, I began to take precautions, seeking, as far as might be, the shadows of the trees. The front of the castle was now full in view, dark and grim, with the great oaken door frowning under its deep-cut arch.

Before, however, I reached the steps that led up to the terrace I turned off upon the left hand to follow a narrow way that led to the side of the build-It took me straight to a little postern gate that once was very familiar to me. As I expected, when I lifted the heavy latch and pressed, it yielded at once and let me enter. Before I did so I glanced upwards and my eyes fell on the lighted windowimmediately above me, but-as it now seemed-very high indeed. For all the years that had passed, the place seemed as familiar as though I had been there but yesterday. 'There was first a long passage that led into what would nowadays, I suppose, be called the housekeeper's room. To us it used to be Madame's room, and there many a time had I had supper with my dear one-who was Madame's niece, and an orphan-at my side. In those days it had been a goodly apartment, handsomely furnished. Even in the halflight I could see how sadly it was altered. It looked like the ruin of its former self. The great hangings showed grievous rents. One large mirror was broken right across. Instead of the splendid carved oak table I remembered, there was a rude bench in the middle of the room, hacked and hewed as if with swords or axes. At the far end of the room was a door which commanded the great servants' This door now stood half open, and through the opening a light gleamed.

So far I felt sure I had not betrayed they tore us apart. He escaped for a , myself by any noise, and very quietly I crept towards the hall door, and looked through. It was perfectly empty, but on the long table that ran almost its whole length were the remains of a half-finished meal, great dishes still warm, tankards of ale, and bottles of wine. There were also several lanterns, one of them alight. The appearance of the place suggested to my mind an abruptly interrupted meal. It also warned me to waste no time, for they who had been here so recently might at any moment return. The thought occurred to me that in such an event I might gain time by fastening the postern gate. But to my disappointment there was only a great keyhole-no key or any other way of securing it. The door between the room and the hall, however, had a large bolt, and was of oak, stout enough to resist almost anything short of a siege train. This fastened, one of my anxieties was a little allayed. And now, the lantern in my left hand and my naked dagger in the right, I began to explore. I knew the stair that led to the upper rooms, but beyond that my knowledge failed. Once, indeed, I had gone further, but then the one thought had cast out every other.

At the top of the staircase hung heavy velvet curtains. Drawing them an inch or two apart, I peered between. What I saw was a magnificent vaulted chamber, little, if at all, smaller than the servants' hall below. It was lighted by a high window with elaborate tracery, looking out, I guessed, on the back of the castle. On the walls were great pictures; sculptured figures in marble and bronze formed a kind of avenue across the room; yet even here and in the imperfect light I could still distinguish the advance of neglect and decay.

At the end of this room under the

window were more hangings looped up so as to show a door. Opening this, I found myself in a passage which would have been absolutely dark but for the feeble light of my lantern. Almost exactly opposite me was another door, but further along the passage I thought I could see the balusters of a staircase.

I was right. A broad flight of stone steps led evidently to the upper floor, and it was there I had seen the lighted window. I had settled in my own mind that in that room I should find my quarry. Of course, if I had stopped to think, there were many reasons why this was most improbable. But at such times one does not wait for the slow processes of reasoning, one falls back on instinct.

At the head of the stairs a narrow landing opened upon a gallery, which I found, to my astonishment, ran round three sides of the great room or hall which I had just left. On the wall side of this gallery were numerous curtains, some eight or nine at least I must have passed. Three or four I lifted, and in each case they concealed a door. There was nothing whatever to indicate what lay behind the doors, and for the first time that night I felt at a loss. Perhaps the darkness and the absolute silence were-in spite of my grim resolve-beginning to tell upon my nerves. I stopped short, and lifting the curtain nearest to me, gently turned the handle of the door. As I did so I heard-behind me, it seemeda curious sound, a pad, pad, pad, heavy yet soft and muffled.

I looked back, there was nothing. Then I looked the other way, and in the light of the moon, streaming through the great window, I saw a sight that made my heart leap and tug, like a dog against a chain. Coming straight towards me down the gallery was a black cat-like creature, but of monstrous size, tiger or panther or

leopard. I know not which. When I first caught sight of it, it seemed to be trotting, but as soon as it observed me turn towards it, it changed its manner of approach, coming on more swiftly, but with a strange sinuous stoop and writhe as if it were gliding along on its belly. Its dreadful eyes were ablaze with lust of blood, its lips were drawn back so as to display the great yellow teeth, and the muscles of the neck and shoulders seemed to roll like waves round a large metal collar, from which hung some links of chain. Most menacing of all to me appeared its unnatural silence. I had just, and only just, time enough to dart inside the door and close it. The next moment there came a dull thud against the oak. which, fortunately for me, was stout and strong. Then I heard the sound of sniffing at the bottom of the door, and then silence once more.

Relieved from my immediate fear, I held up my lantern and investigated my surroundings. The room in which I found myself bore fewer signs of decay than any other part of the castle I had as yet visited. The tapestries and carpets were rich, of costly materials and elaborate design. most striking features, however, were a series of pictures-evidently family portraits-on the walls. Among these I had little difficulty in recognizing my arch-enemy. There he stood, hatefully splendid. A cynical smile curled his lips, the clear cold eyes looking full at me with an expression of utter weariness and unfathomable contempt. He reminded me of some deadly snake, magnificent but fatal, and as I remembered my beautiful white dove my hand grasped the dagger with a still firmer hold.

And now the end of my wanderings was very near. For, opening the door at the opposite end of this room, I perceived at the end of a short passage a light shining out from a room. Set-

ting down my lantern—for I had no need of it now—I crept very quietly, steadying myself by the wall. Once more a thrill of excitement and passion seemed almost to unman me.

I reached the door, which was only a few inches open, and listened intently for a minute or two. There was no sound except the ticking of a clock. Noiselessly, I widened the opening till I could see inside. It was a fair-sized sleeping chamber, richly furnished and hung with heavy tapestries, yet even here the marks of decay were evident. But in truth I took small heed of the furnishing, for there on the bed lay two figures both fast asleep, and one was he whom I had come to seek. It was a cot rather than a bed, and my lord, wrapped in a long, loose, brocaded garment, lay across it, turned a little on his side, so that his face looked towards me.

He had changed indeed. The object of the hatred that had been fattening in my heart all these years was my lord of the picture in the hall. This was an old man. But hatred is an accommodating passion, and at the sight of this sleeping figure my dagger was naked in my hand before I had so much as thought of drawing it. And as I gazed upon him the likeness between what he had been and what he now was, became every moment plainer. His features were clear-cut and regular as ever, the lips were still full and red, and the hair though almost white was fine as spun silk. Even as he slept in careless abandonment, there was about him an air of dignity quite unmistakable.

The other was a little child, hardly more than an infant. It was in the bed, the little eyes fast closed, the rosy lips half open. One naked arm stretched out lay across the old man's shoulder, and the tiny fingers rested on his cheek.

The knife was already and instinc-

tively raised before I caught sight of the child. I meant to wake the old man that he might know whose hand had wrought justice after many days. Now I could not utter a word. My uplifted arm sank to my side. The child seemed to me like some guardian angel, its very presence a sanctuary that I durst not violate. And even as I gazed, a smile I can only call heavenly irradiated the lovely little face, the expression, I suppose, of some delightful dream.

Some time I must have stayed there fascinated and undecided. When I gazed at the old man compunction died and the thought of vengeance resumed sway. Then, before I could strike, the tiny hand arrested me, and I stood powerless. I could not slay my enemy then and there, but it should only be a respite, and a brief one.

I took my dagger and laid it very gently on the bed, the haft close to the little arm, the point of the blade just touching the wrinkled cheek. The old man would wake to find that sinister warning, and it would have the more significance because he would recognize the knife itself; for it was one of his own possessions, and on the blade was engraved the hateful crest-a wolf's head with grinning teeth, and for a motto three words of Latinnon sicca morte. Indeed, it had drunk my blood, for it was the very knife with which my lord had stabbed me, and which I had wrested from him at the moment of our being torn apart. How I had given it into safe keeping and recovered it is a tale which I must not stay here to rehearse.

But my plan miscarried. I had not allowed for the light sleeping of an old man. Hardly had the slender steel touched his cheek, though, indeed, it rested there as lightly as a fallen leaf, when his eyes opened. For one brief moment they gazed at me quiet and vacant as though they saw not; the

next, memory and courage and cunning sprang forward to garrison them.

I saw myself unarmed, and thrust forward my hand to regain possession of the dagger. With a movement as quick, he drew himself up, and the knife fell to the floor. For an instant, startled by the sound, his eyes followed its fall and he stooped to seize it.

That instant's pause gave me my chance. One swift glance I cast around. Over the bed on the wall a couple of unsheathed rapiers crossed each other. I leaned across and tore one from its fastenings. It was the action of a second of time, but, as I turned, the knife thrown from the stoop hissed past my ear and quivered high up in the wall.

We stood face to face. He unarmed, I with the rapier in my hand. My confidence had returned, and he showed no sign of fear. In height we were fairly matched, but he was the older by ten years or more I knew, and vice had sapped his strength as much as my dungeon life had crippled mine.

"I really must apologize," he began, "for that cast of the knife. The fact is I took you for a vulgar robber. I recollect now. You have been abroad for some time. I trust it has agreed with your health. This light is not the best for old eyes, but as far as I can see, you are in good condition."

There was something in his almost incredible assurance that shook my own. He had, too, that indefinable air of serene distinction which is in itself no mean weapon. I tried hard to match his coolness.

"I thank you," I said gravely. "I believe my strength is sufficient for the business in hand."

"You thought so once before," he returned with a pleasant smile.

"We are alone this time," I said significantly.

"Except for the child," he answered,

"and he is somewhat young to appreciate the business in hand."

On these last words, borrowed from me, he laid a strange, mocking emphasis, and dwelt upon them as though their sound was very delectable to him.

"If it had not been for him," I said, "I would have killed you like a rat."

For one second his eyes flashed at me hatred and contempt. The next they smiled.

"You shall be well paid for your chivalry. Peasant born though you are, I will cross swords with you myself. After all, you had some learning. Be good enough to hand me down that fellow rapier to the one in your hand."

He spoke with a kind of languid authority from which you could never have suspected that he was absolutely at my mercy.

There was a mirror on the wall in which I could see his movements, so I complied with his request. I did more, for after I had lifted the sword I tip-toed and plucked out the dagger that had been my companion for so long. As I did so, I saw a shade pass over his face, though he said not a word. I handed him the rapler, point first, lest he should repay my courtesy with a sudden thrust. Then I stepped a few paces from the bed, into the room, and stood on guard.

He watched me with what certainly looked like a smile of genuine amusement.

"I hope your play is better than your stand," he said, "or I shall have but poor sport. But not here. You will certainly scream when I begin to prick you, and I would not have the child disturbed. Look at him; he is a true son of the race. Your men shall be his slaves and your women his toys. So it has been in the post, has it not?" And again he smiled, but this time it was a devilish smile, for he was prob-

ing an open wound, and he knew it and rejoiced.

But though I was in agony, one thought kept me cool and strong. His hour had come. I knew it, though, indeed, even now the odds were heavy against me. I had never been a very expert swordsman, while I made no doubt he was a master of the weapon, with cunning and treachery to help him.

At that moment the child awoke and began to whimper. Instantly the old man flung down his sword, and, running to the bed, fell to petting and caressing the little one, motioning me to stand in the shade. In a minute or two he was successful, and the whimper died into silence. But as I watched them I could see, indeed, in spite of all the long years that separated them, a dreadful likeness, and I could have almost found it in my dark resolve to have slain them both, and so, perhaps, have made an end of the hateful stock.

Very soon he rose up, and, laying his finger on his lip, pointed to the door. But I had no fancy to precede him with the rapier in his hand. divined my thought, and, with a fine curl of the lip, he led the way himself into the passage where my lantern was still burning. This he lifted, and, opening a door, disclosed another pas-About half way down he stopped, and after feeling along the wall, drew back a sliding panel and entered a large room. By the light of the lantern I could see it resembled in size and shape the chamber I had left so recently and in which I had seen my enemy's portrait.

Against the wall at a height of about six feet was a wooden bracket shelf, on which stood a candelabrum with a number of tapers. One of these he took out and lit with the lantern, and with it soon had the whole ablaze.

This room had little in the way of

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furniture or decoration. There was not even a table. Only a few carved. high-backed chairs were ranged at intervals against the walls, and nearly opposite the bracket was a clock in a tall antique case. At one end was a door which stood an inch or two open. At the other hung heavy tapestries, which might, I surmised, hide the window. Drawing forward one of the chairs, my adversary took off the loose wrapper which he had been wearing, and proceeded very deliberately to adjust his fine cambric shirt, rolling up his sleeves and talking all the time.

"You have had your share of good fortune," he said. "My men are busy to-night, paying off a small score that has been running for some time. I had to hurry the lazy variets off myself only an hour ago, or they had drunk themselves dead, and I should have missed the pleasure of this little encounter. Even now I have but to sound a bell—there is a cord by the side of that clock—and the footmen from the east wing would be here in a moment, but I always was something of an eccentric, and I prefer to deal with you myself."

"It is not I with whom you have to deal," I answered.

"What a voice! and what a manner!" he mocked. "You really should have wooed good mother Holy Church instead of a pretty little baggage with blue eyes—were they blue? Upon my word I forget." And once more he cast upon me that keen, cruel smile of interrogation.

I raised my sword.

"You are a better swordsman than I am," I said.

"You pay me too high a compliment," he interrupted.

"But," I continued, "it is God Himself who is about to take your sinful life."

"And I had no notion whom I had

the honor of welcoming beneath my humble roof. To think of it!"

He still dallied, not, I knew, from cowardice, but I believe from sheer-enjoyment of the torment which he thought he was inflicting. But, indeed, I had now fallen into a mood that made me heedless of his gibes. What I had just said, I verily believed. God Himself was present to demand the penalty of crime, and the awe of such a judgment overshadowed me.

At last my lord was ready, and rapler in hand came into the middle of the room. Then he drew back a pace or two and motioned me back.

"If it meets with your approval," he said, "I would suggest that when in a couple of minutes the clock strikes one, we take it as a signal to commence."

I nodded, and we took up our positions a little distance apart.

"And so you think the good Lord is going to avenge poor little Blue-eyes after all these years? I am afraid your touching faith is going to have rather a disagreeable shock. God or no God, I have you, my dear friend, in half a dozen ways, and this time you shall not slip through my fingers. Why, you fool!" he cried, with a sudden change from his tone of polite irony to one of brutal energy, "you've had your chance and thrown it away. It's my turn now."

As he spoke the clock struck—a clear, bell-like note, and instantly he attacked me with the utmost fury.

It was as I had expected. I was like a child in his hands. Before we had exchanged a dozen passes I was bleeding from a couple of pricks either of which might have ended the fight had he so willed it. Indeed I could do little but make furious lunges, which he parried with the utmost certainty and ease, continually pressing me back, till I began to wonder what would happen when I reached the end

of the room and could retreat no more. I realized that he was only playing with me as yet, though I could not divine his motive for delaying. Before this actual, physical demonstration of my helplessness my confidence began to fail. My only hope was that he might overreach himself and exhaust his strength. At any moment, I reflected, a lucky thrust might turn the scale. At length I thought my opportunity had come. I made a desperate lunge, and at that very moment his opposing blade dropped, and my point went home just beneath his heart. All my strength had been in the thrust, and I looked to see him fall at my feet. Instead, a horrid jar ran through my sword arm and the blade snapped in half, while the useless hilt dropped from my numbed fingers. Instantly I guessed what had happened. Under his cambric shirt was a coat of mail against which my steel had shivered. The shock drove him back, but only for one brief moment. The next his blade menaced me unarmed as I was, save for the dagger which I had almost involuntarily shifted from the left to the right hand.

But more dreadful than the gleaming steel was his face. It seemed to me as though he had cast aside a veil, and now for the first time showed me his true countenance. All the mask of refinement and high breeding seemed to have vanished, and left behind only brute ferocity and cunning. His voice, too, sounded different. The restraint, the cynical humor, the delicate articulation were replaced by thick, coarse tones of animal triumph.

"Fool! Blockhead!" he screamed, "now you shall know the pains of death. Back, I say, dog! Tricked, duped, beaten, do you still try to brazen it out? In another moment that bold face of yours shall be white with fear and agony. Back! further back! Ha! what did I say? Do you begin to

guess your fate? Why not invoke your august patron? Back! Back!"

As he spoke he pricked me again and again and drove me before him till I was close upon the hangings. But it was not the fear of his sword that had changed the fashion of my countenance. There was that in front of me from which a brave man might well shrink in terror.

It was just after I had been disarmed that I first saw it. I was being driven back when suddenly I became conscious that beyond my adversary there was some one or something in the I was quite desperate, and lifted my eyes from my adversary without either hope or fear.

And what I saw was this. The door at the end now stood almost wide open. And creeping, crawling, gliding along the floor came the same monstrous creature from whom I had so narrowly escaped only an hour or so before. Its appearance in this fuller light was, if possible, even more terrifying. The sleek black body, the hind quarters tilted up, the long tail restlessly swaying from side to side. The dreadful head, flat on the top as if abruptly cut away, the ears close laid back, the eyes ablaze with green fire, the retracted lips and protruding jaws, the ling, all this combined with its stealthy silent approach was indescribably horrible. I do not wonder that my face looked white and terror-For the moment I forgot stricken. that my lord was an enemy and only remembered that he was a man.

But he himself broke the spell.

"Back, hound!" he cried, pressing me right back to the tapestry till my back rested against something hard and ridged. "Say your prayers, for the end of this play is come."

I looked beyond him. When he was still, the beast lay still, but he must needs wave his rapier and dart in and out. Every time he did so it began to crouch for a spring.

There was a moment's pause. He stood still opposite me watching me with a malignant smile which slowly gave way to a frown of impatience. And the great black beast crept an inch or two nearer, its tail still flicking from side to side.

Suddenly my lord made a little thrust at me which drove me hard against the hangings and whatever was behind them, while at the same time he made a loud hissing sound as when one urges on some savage animal.

The effect was instantaneous. Like some vast stone from a catapult, the panther launched itself, on him and bore him struggling to the ground. He gave a cry, not loud but lamentable. One glance I caught of his face, and I think it will go with me for the rest of my days. Horror and amaze and a sudden desperate resolution-for he was brave to the heart's core-I can read them all in that transfigured countenance. But it was the face of a man, and for all the hatred I bore him I had rather remember him so than as he showed when he was driving me against the hangings.

These I now tore apart, and behind were the bars of a large cage stretching flerce mouth with its white hairs brist- 'nearly the width of the room. At the side nearest me was a door with a bolt. I pulled this back and found myself within the cage, where, the curtains being now open. I could see that the bars were very wide apart. Near the centre of the cage was a great block of wood with an iron staple, and attached to it a long piece of broken chain. This, however, I only noticed as I rushed through to a half-open door at the back, one of the doors, I found, that opened on to the gallery where I had already been. Before I closed the door I ran back a few paces into the cage and listened. There was a sound that made me feel sick, though

it was only a loud, fierce purring noise. But while I stood there a strange thing happened. It was almost dark in the cage, and suddenly I saw what looked like a thin red vein run upwards along one of the folds of the curtain, then spread and divide like the veining on a leaf, till it reached one of the edges, when a long tongue of flame leapt out between the bars, showing a cloud of smoke. Instantly I remembered the lantern which my adversary had set down close to the hangings after lighting the tapers. Doubtless it had been overturned by the panther's spring or in the subsequent struggle, and this was the result.

The hangings were evidently dry as tinder, and even in the moment I stayed I saw the red veins spread with wonderful rapidity, while the tongues of flame multiplied and the smoke grew blinding.

I turned and hurried out into the gallery. A fierce joy was tingling in my blood at the thought of this accursed castle being burned. I felt a longing to be outside in the fresh, cool night air, and there to watch the wholesome fire perform its cleansing work. But my lantern was gone, and in the dark it was no easy task to find my way. It seemed an interminable time before I rediscovered the staircase that led down to the large hall. By this time the smell of burning was quite unmistakable, and strange crackling sounds were audible. Owing either to a change in the position of the moon, or to the presence of clouds, the hall was much darker than before, and It was some time before I could grope my way to the curtains at the head of the steps leading below. At last, however, I succeeded, and was already half way down when I heard the short, sharp cry of a child in pain or terror.

I stopped. I had altogether forgotten the child. Though I had no very clear idea of the relative position of the rooms, I knew the fire was not very far from the room where I had found my lord asleep. Now that he had met with so terrible a fate I felt it would be impossible to abandon a helpless little creature to the chance of so cruel a death. At all hazards I must place it in a place of safety. At the same time I knew there was no time to be lost. Even if the fire did not outrun me, there were the footmen in the east wing to be remembered, and the men who were paying off the old score. At any moment either of them might appear and bar my escape. Then the thought of that awful black monster made me hesitate, but I reflected that he would probably still be busy with his victim where I had left him. Still the recollection of those flaming eves and cruel tusks made me move with light and wary steps, and the slightest creak, sometimes the very sound of my own footfall, brought me to a halt with straining ear and beating heart.

In the darkness I must have gone astray, for I went from door to passage and passage to door without finding the steps to the gallery.

Instead, I suddenly found myself at the foot of a grand flight of marble steps, evidently the principal staircase. Here it was comparatively light, for there were several large windows. I hastened up, the noise and the smoke increasing with every step I took. At the top of the stairs was a spacious landing, narrowing on one side to a corridor, at the end of which were folding doors. These I opened, and found myself in what looked like the very passage I was in search of, only if so I had entered it from the other end. There was the room with light streaming forth through the half-open door. Whatever doubts I might have entertained were soon dissipated, for taking a step or two forward I recognized the decorations on the wall. I could also see further down the pas-

sage the other door, wide open, through which my lord had led the way. Through this door wisps of smoke were drifting, and I saw that I had no time to lose. I was just about to make for the sleeping chamber, when suddenly, without the slightest warning, shadow fell across the wall, and the next moment the awful beast itself came trotting out, licking his lips with lolling tongue, his eyes flaming in the darkness. I suppose I must have been in the shadow, for he evidently did not see me, but trotted across to the open door. I waited not a moment longer, but running back to the folding-doors, hurried through, and closed them from the outside. Then I rushed down the great staircase, and by good fortune rather than recollection soon found my way to the great hall. Again I was at fault in my search for the descending flight of steps, but eventually I found them and flew down. As I entered the servants' hall, I heard the castle alarm bell begin to ring with desperate peals. And in the intervals I fancied I could hear the sound of horses outside. opened the postern gate and for a moment stood listening. It was so, a troop of horsemen were coming up the avenue. I could hear the jingling of their spurs. But I had no fear of them, for here I was familiar with every path and turn. The way by which I had come from the terrace ran straight on for some twenty or thirty yards and then curved round to the lodge by which I had entered. As I felt certain the men would stop at the postern, I considered myself perfectly safe, and even loitered near enough to hear their cries of wonder as the bell thundered in their ears. Then remembering that the stable lay in the direction I was following, I hurried forward, and in a few minutes stood outside the castle demesne on the high road. And still the bell clamored its appeal for help,

that would soon bring the villagers out of their beds.

But the road, I recalled, mounted higher further on, and ran through a little wood on to the brow of a hill that commanded a noble view of the castle and its grounds. From that spot I had often looked upon itsometimes with her at my side-and admired its goodly proportions and fair surroundings, but never had the sight of it given me such satisfaction as now. The moon was still high in the heavens and the dome of sky wonderfully bright and clear. The building itself stood out in sharp relief, the black shadows making the gray stonework look almost white. The east wing was opposite me, and almost every window was lit up. The terrace was just in view, and the great door was wide open, while I could see figures moving about in hurry and confusion on the gleaming gravel. And all the time a steady murky column of black smoke, increasing in size, it seemed to me, every moment, and spangled with innumerable sparks, rose like the smoke of a burnt offering from the other wing. And even as I gazed a broad sheet of flame, red and angry, suddenly flashed up, curled, twisted and disappeared, while another black pillar reared itself over the doomed house. I thought of the dead man, cruel, crafty, mocking, but fearless, and I fell to wondering whether the keener flames of the wrath of God may purify as well as consume.

It seems unreasonable, but as I watched the destruction of that ancient castle, the bitter hatred I had so long cherished against its owner began to pass away, and it even came into my heart to thank God that when the stroke fell it was not my hand that sent the wicked but intrepld spirit to its last assize.

The Author of "The Greatness of Josiah Porlick."

The Monthly Review.

THE NILE FENS.

The fenland of the Nile is not visited by the thousands who seek their pleasure winter by winter in Egypt. As they enter from Alexandria, a corner of it slips by as the train gathers speed for the run to Damanhur, and all the later wonders of the valley seldom efface that first impression of the Delta-the long vista of level mere under the sunset, and copper-green fields and anthill villages outlined against an amber sky. The contrary corner can be seen from a hurricanedeck between Port Said and Ismailia, where the silent stretches of marsh open on the right hand, relieved by flocks of long-legged birds which wade far out, or trail like wisps of smoke across the sun. But that is all the tourist sees. He never leaves the beaten tracks to explore the Fens, and no one since Heliodorus has described anything but the fringe of them.

They form a land apart from the rest of Egypt, very difficult to penetrate or to traverse even by boat, and inundated by stagnant waters of the great river, which are dammed by a broad belt of dunes, and contaminated with drainage of salt soils and the in-On the seaboard itself setting sea. lies an almost continuous chain of vast lagoons, and for a long day's journey south of these the land will still be found deep marsh, rotten with the overflowing of disused canals and lost arms of the Nile, almost trackless, and only now beginning to undergo here and there the first process of reclamation.

In their present state, as might be expected, the fens have very few inhabitants; and perhaps none of the sparse settlements, now found within their southern fringe, is much older than the nineteenth century. For al-

most without exception these have grown up round isolated farmsteads. and still bear the names of local owners of land who were living far to southward not above a generation or two ago. When the Egyptian population under the rule of the last Mameluke Beys was not the half of its present figure, there was little temptation to attempt the conquest of saline and water-logged soils; and local tradition remembers a not distant epoch-not more distant than Muhammad Ali's day-when all the district was a secure, if uncomfortable, refuge for the broken men who would avoid the tax-gatherer and the conscriptionofficer, or had deserted from the battalions that the inexorable Pasha was for ever sending to the conquest of Arabia, the Sudan, or Syria. pute of the northern marshes remained what it had been in the fifth century after Christ, when Heliodorus described, in the opening scene of his "Aethiopic Romance," an amphibious outlawed society living there by fishing and raiding; and some trace of this state of things is still to be discerned in the timid and farouche manner which characterizes even now the inhabitants of the few older hamlets. Here alone in modern Egypt fellahi women habitually bar the outer door at sight of a stranger, and children run to hide among the reeds or brushwood, and even grown men, met in the way, hold aloof like Bedawis till informed of your character and purpose. Although the animal is certainly not now to be found there, many natives asserted to me that they had seen the wild boar in past years, and twice I came on traditions even of the hippopotamus, traditions held by simple men, who can hardly have derived them from

sources. And why not from their fathers? For there is historical record of a hippopotamus having been killed in the Northern Delta in 1818.

Despite, however, the discouraging face of Nature, this fen has not always been the desolation it now is; and it was the knowledge that it had had a more populous past which took me there in the spring of 1903. The maps of it, all imperfect and sketchy as they are, show a number of ill-defined spots whose names are prefaced by kum or tell, sure indication of sites of ancient towns. For the past three years there has been found in Crete proof on proof of communication with Egypt, and where better than in the Northern Delta should its traces be sought beyond the sea? To be sure, nothing reminiscent of Ægean culture had been found in the Lower Delta up to that time; but there remained this unexplored marshland. I looked up the authorities. They supplied nothing, not even a mediæval or modern description of the region. All travellers had passed it by and betaken themselves to the higher valley. So I had to go, as to an unknown land, and see for myself; and, if in the event the things I had hoped to find were not forthcoming, others appeared by the way which I had not been led to expect,

To visit the marsh-land you may leave the "Berari" railway, which traverses mid-Delta from Dessuk on the one Nile to Sherbin on the other, at any point, but preferably at Kafres-Sheikh or Belkas, for thence roads have been made northward towards the limit of habitation. That is soon reached so far as the great flats are concerned, lying between the three or four main waterways, which are old Nile-arms. along the farther course of these a few tiny clusters of huts may be seen to northward. Lower Delta hamlets are built up of mud into such fantastic pepper-pot forms as will throw off the frequent rains of the Delta, and, seen

afar, suggest nothing so much as structures of gigantic building insects. Thereafter nothing lies ahead but the great saline flats, upon which vision is limited only by the curvature of the earth. Their monotonous surface is varied by great tracts of inundation, which dry slowly as the spring advances, leaving broad plains reticulated like a crocodile's hide, and always most treacherous where seeming most dry: for under their thin superficial cake of mud, white with efflorescent salts, lie depths of black saturated sand. Elsewhere the level is broken by soapy sand-hummocks, heaped round and over shrubs or clumps of reeds; and among these pool succeeds to slough and slough to pool, and the going for many miles is, at best, worse than that on loose chalk-land at the breaking of a long frost. There is a sensation of death in all this spongy land, which exudes water and salt round your heel; and nothing serves to dispel it-not the many birds, shocking in their tameness as the beasts seen by Alexander Selkirk; not the myriad insects which assail the traveller who is luckless enough to ride down-wind; not the teeming life of the ditches; not the half-wild buffaloes, strayed from southern farmsteads, which you may startle from their wallows and send soughing knee-deep through the slime; not even that vivifying force of Egypt, the ruffling north wind, tirelessly bowing the strident Yet with all its monotony and reeds. deadness the land exhilarates the traveller; for the breeze blows hard and clear off the sea and the salt lagoons to northward-hard and clear, in Stevenson's phrase, as through the rigging of a ship-and the flats have the mysterious attraction which is common to all great levels of free horizon.

The vast soapy bogs, and even wider expanses of permanent inundation, are fed by the waste of drains and canals which spring far up the Delta and expire at last unregarded under the face of the dunes; and by a network of forgotten water-ways of Ptolemaic and Roman date, wandering now unguided through the marsh. To meet with one of these in a day's journey is to lose many an hour in seeking a ford through the deep silt from one crumbling bank to another, and to endure no mean discomfort stripped under a noonday sun for the benefit of mosquitoes. too rarely will you obtain passage in the log-boat of a marshman, descended from some outlawed refugee, who spends his days in fishing and his nights prone under a beehive of reeds and mud, which might have sheltered a lake-dweller of the Neolithic age. Heliodorus mentions boats "rudely hewed out of the rough tree" which crept about the channels, and on his excursions from Alexandria about the year 400, he probably saw scenes little different from those which offer themselves in the fenland in the present year of grace.

That I was able in the long run to visit every spot to which I had a mind, in a country where the obvious road is usually the least possible, I owed mainly to the guides, horses, muleseven steam launches-put at my disposal by the Société Anonyme du Behéra. The advent of this great corporation is the modern event of most importance in these wilds. With a seat in Alexandria, a Board composed of most of the nationalities represented in that polyglot city, a British managing director, formerly in high place in the Egyptian Department of Public Works, and a staff of young Britons, Frenchmen, Italians, Greeks, Copts, Armenians, Jews, and what not, this company is achieving the reconquest of the marshland, and every year the smoke of its traction-engines rises nearer the lagoons: Its work is worth the notice of every geographer interested in the modification of the world's surface by man.

and the approval of every one concerned with the economic development of weaker races through the capital and enterprise of the stronger. ciety began where the local magnates of Kafres-Sheikh and Belkas, once called "Little Kings of Berari," had been forced to leave off, in despair of the sourness and saturation of the soils. The larger canals and drains had been cut and embanked through the ooze by Government labor; but the Society had to construct the lesser, and, that done, to attack certain of the nearer and higher-lying lands with great harrows. which tear and distribute the soapy hummocks, and with steam-ploughs. which open the surface to the drying wind and sun. Washed with sweet Nile water, the slime was found capable of bearing rice and barley for one year or two, and, purged by such crops, would send up here and there clover in the third season, and even a remunerative yield of cotton. Presently the local husbandmen living in villages to southward were induced to take leases, and ere long to buy, while the steam-engines moved on into the marsh. In ten years the company has built three great model farms and many smaller ones; levelled and restored to cultivation thousands and thousands of acres; abolished a third of all the marsh in Berari, and caused population to return to a region where, a generation ago, the lone Coptic Convent of the Apparition of Our Lady to St. Guemiana was the last outpost of man. Moreover, native landowners have now learned something of the Society's methods, and far out in the swamps many a farm-oasis has been called into being where till lately all was salt and ooze and sand.

The process of reclamation is a rapid one, designed to secure a quick return, and the land is made rather a possible than a very sound soil, for there is little fall and the draining is hardly more than superficial. But so much amelioration is enough for the native husbandman, and it seems as much as, in a phrase of economics, the "local traffic will bear."

Not because it was designed to that end, nor because it is prosecuted with any but a strictly commercial purpose, to make cent. per cent. for shareholders, this sort of reclamation does, indeed, effect more for local civilization than any Western enterprise with which I am familiar in the Nearer By its knowldege and capital this Behéra Society raises large tracts of land out of a desolation in which small agriculturists would have had to leave them for ever; and since it aims, not to retain these, but to hand them over to the native, improved up to the point at which he will be capable of dealing with them, it creates no alien latifundia. Small holdings multiply in the wake of its steamers, a fact which in itself implies no small economic and social gain, and native human effort is encouraged to continue and achieve the local conquest of natural conditions. The civilization so promoted remains one of purely native spring and character. An indigenous population is attracted at last into a region long lapsed to wilderness, and there it is induced by the building of hamlets, the making of roads and bridges, and the establishment of periodic markets, to form a settled, stable, and self-helping society -all, if you will, to the great profit of an alien corporation, but obviously to the still greater profit of the land of Egypt.

Raised even at this day less than a metre at most above sea level, impossible to drain thoroughly by any natural water-flow, sodden with all the salts of Nile, wild, untenanted, seeming, if any on earth,

A waste land where no man comes, Nor hath come since the making of the world. the Nile fen, nevertheless, is full of human memorials. There are few sights more astonishing than that of mounds, covering nearly two score of buried towns, in that water-logged desolation, and I am still at a loss to explain how so large a population, dependent presumably for the most part on agriculture, came to settle and subsist there in an age to which pumps and any but the simplest methods of drainage were unknown. That it practised agriculture and did not live by fishing alone, is abundantly proved by the maze of old irrigation channels and drains about the mounds. You may even descry here and there, on the higher parts of the present marsh, a trace of ridge and furrow. In the main the culture must have been of cereals. Since Egypt, as is well known, was long the main feeder of the city of Rome, it need surprise no one that every arable inch in the Nile Valley should have been pressed to produce. Wheat, and doubtless on the salter lands barley, must have paid the Delta cultivator in those days at least as well as cotton does now. But it should not be forgotten that he made a profit also in Imperial times out of other cultures long forgotten in Egypt, such as those of the vine and olive. From the first was produced, in the marsh-land of Mareotis, a wine celebrated in the Roman world; and there are sufficient remains of oil presses lying on the surface of the Berari mounds to prove the former existence of olive groves in the locality. But how to explain such cultures in such a district? The experienced Europeans now engaged in reclaiming it are convinced that they would be impossible now, owing to the excessive saturation and salinity; and, indeed, one can hardly avoid belief in some subsequent subsidence of the land, such as, indeed, may be proved to have actually taken place not very far away, where the foundations of Ptolemaic palaces are to be seen awash in the eastern bay of Alexandria.

It is certain, however, not only, as my tentative digging proved, from the elevation of the towns on artificial mounds, but also from the very little that can be learned of the district in ancient writings, that it was always to some extent a fen. More than once in history rebels against the Egyptian Pharaohs found security in the northern swamps; and the holy city Buto, whose oracle and festival are mentioned by Herodotus, is said to have lain on the edge of a great marsh. Its site, perhaps the most important still not certainly identified in Lower Egypt, was somewhere in the south-west of the fen region; and a probable site has been found on the great mounds of Farain, a few miles north of the Berari railway and ten from the east bank of the Rosetta Nile. Moreover, there is that actual description of a great tract of swamp and islands in this part of Egypt left by Heliodorus. His dainty romance of the loves of Theagenes and Charicleia, the best and almost the only novel in ancient Greek, which is said (probably without truth) to have drawn down on its episcopal author the censure of a startled synod, thus describes the marshes (I quote the rendering of the Elizabethan translator. Underdowne):-

The whole place is called the Pasture of the Egyptians, about the which is a lowe valley, which receiveth certaine exundations of Nylus. by means whereof it becometh a poole, and is in the midst very deepe, about the brimmes whereof are marishes or fennes. For looke, as the shore is to the Sea, such is the Fennes to every great Poole. In that place have the theeves of Egypt, how many soever they bee, their common wealth. for as much as there is a little land without the water, some live in small cottages, others in boates which they use as wel for their house as for passage over the poole. In these doe their

women serve them, and if neede require, be also brought to bedde. When a child is borne first, they let him sucke his mother's milk a while, but after they feede him with fishes taken in the lake and roasted in the hoate sunne. And when they perceive that he beginnes to goe, they tie a cord about his legs, and suffer him but onely to goe about the boate. . . . Moreover the great plenty of reede that groweth there in the Moozy ground is in a manner as good as a bulwark to them. For by devising many crooked and cumbrous wayes, through which the passage to them by oft use is very easie, but to others hard, they have made it as a sure defence, that by no sudden invasion they may be endammaged.

This description, however, refers only to the extreme north of the present marsh-land, where still exist great lagoons and a large amphibious population of fish-eaters; where, too, are the sites of several settlements of Ptolemaic and Roman times, half buried in the shifting dunes of the sea-It is the inland or southboard. ern half of the region that, in its present state, looks so little fit ever to have been inhabited by man. Nevertheless, you may nowhere travel far there without happening on his handiwork. His ancient ports, his half-silted canals, with broken dykes, lurk in all quarters, making an evil harborage for insects and traps for the sanguine explorer who thinks to take a bee-line from point to point; but not infrequently they will lead you, if your purpose be to see ancient sites, straight to the mounds, to which they once carried traffic and sweet water. Arrived. you will find the profile of the dusty tell broken by no imposing ruin, for in this region the Roman builders used little but brick, and the most of that unbaked. But the surface will be strewn with vitreous slags, left by the Arabs, who have burnt what stone there was for lime; with fragments of decaying

glass, whose iridescence vies with the brilliant oxides on scraps of copper pans or tools or almost illegible coins, which range from the later Ptolemies to the Byzantine and even early Arab times; with sherds of rotten blue faience and earthenware, painted or plain, but all of the commoner kinds. short, it offers but poor loot in return for all your labor through bog and soapy sand. Nor will you get much more by digging at a venture, for these mounds are made mostly of little adobe houses, piled one on another, their contents long ago rotten with salt; and below them you must hack through some feet of empty sand, compounded by rain and pressure to the consistency of asphalt, which has been piled upon the lowest ruins to make a dry bed for later habitations, to find at the bottom nothing better than a heap of black Nile mud, brought together by the first builders to raise the town at its foundation above the damp level of the sur-Now and again the rounding flats. newly come natives, who dig in these mounds, on their own behalf or that of the Behéra Society, for the virgin earth, containing a suspicion of nitre, which exists on all ancient sites in Egypt, or for ready-made kiln-dried bricks of Roman times, turn up drums or capitals of small columns, an inscription or two, or even such a sculptured Roman head as is now kept by the Society at Kum But those are rare rewards, and you will more probably have to be content with the stirring of your imagination. These desolate trophies of a dominance over Nature, carried to a point to which our own age is now painfully trying to attain, are the trophies of Imperial Rome. I have done what I can to identify those little lost towns, and I find among them two capitals of provinces in the time of Hadrian, three Byzantine bishoprics, and as many towns that were not episcopal sees but have left a name in the early

Arab history of Egypt. But all were most obscure places. The wonder is, not that great towns stood here, but any towns at all.

These mounds of the North Delta are disposed in three chains, running from south to north, which seem to align the courses of two of the lost ancient Niles, the Thermuthiac (or Pharmuthiac) and the Athribitic, and that of a central main canal, now know as the Bahr Kassed. There have been considerable changes in the courses of the Delta Niles. For instance, the western-most, the Great Nile, or Agathodaemon, which used to flow out near Canopus (Aboukir), now flows only down the bed of what was a secondary stream, the Taly, and issues at the old Bolbitinic estuary, the modern Rosetta mouth. It is curious to note how utterly the traces of its ancient channel have been effaced in about a thousand years. It used to pass by the Greek city of Naukratis, and there perhaps its course can still be traced in the hollow between the site and a small mound, which is evidently the remains of a heaped-up bank such as would have aligned the river. Thermuthiac and Athribitic Niles are now represented respectively by the canalized Bahr Nashart and the Bahr Tirah, but the modern streams do not run continuously in the old beds. actual Athribitic channel I discovered in mid-marsh, sweeping past a chain of mounds; it has long been dry, but its dykes still remain, defining a bed about 350 feet wide.

So much for the true marsh-land. North of it lies the lagoon district, fenced from the sea by a broad belt of dunes. It shows in most respects a sharp contrast to the fens, being a region comparatively rich and populous, and of very old settlement; but it is neither less remote, nor better known to the casual tourist in Egypt. Nor is it one whit less interesting, for nowhere in the Nile land is to be seen a region

more primitive, or a more recent contact of aboriginal Eastern folk and Western in-comers. Here the two elements still meet almost as strangers, each unalloyed by the other. Indeed, with the seaward part of the district it may still be said that the European has nothing to do. If once in many moons a British inspector of coastguard or canal outfalls pay a flying visit, he will be stared at a moment and forgotten, like some strange bird that has lighted suddenly on the lagoons.

To reach the lakes you must descend one of the greater canals of the Central Delta before the summer dryness in a boat of the lightest draught, and, leaving the last of the locks far behind, pass beyond all habitations of Nile husbandmen into an amphibious Limbo, in doubt between land and water where no life of man abides continually. Soon the canal dykes cease on either hand, and the banks fall to a few inches in height. Let your boat slip on a mile or two more. The flood brims bank high, its wavelets slope on to the land, and, lo! you find there is no longer land either to right or left, behind or before. Undefined by any line of coast, Egypt has slid at the last under her own waters and become invisible at less than a mile away, and the voyager finds himself adrift on a sea, seeming limitless, so low are its shores, and bottomless, so turbid are its harassed waves. Yet, in fact, if a tall man let himself down into any part of the great area of this lake the surface will scarcely rise to his arm-

Holding on its course, the boat passes at once out of that dead world of the fen into one of singular life, a life not of land any longer, but water, whereof forewarning was given some miles up the canal at the last settlement of man. There fishing nets hang to wind and sun, and a little fleet of keelless craft collects any afternoon

while a Copt sells its draught of fish at auction. The catch of each crew is offered as a whole. A salesman squatting over the mat stirs the palpitating heap to work the larger fish to the top; a fat one he picks out and puts by in a palm-leaf pannier for the auctioneer. a second for the writer, a third for himself. The rest is bid for at prices ranging from ten to forty plastres, sold, packed on asses, and despatched to feed the marshmen for many miles around. You will not sail a mile on the lake unamazed, at its scaly wealth. Silvery bodies leap by tens and twenties from the ochrous surface, and the water boils with the passing of shoals. Boats at anchor, boats adrift with trailing nets, boats under full sail, multiply as one goes north and east, till all the loneliness of the Limbo is forgotten. All round the horizon spring groves of perpendicular poles crossed by poles oblique, the masts and lateen yards of invisible hulls, moored by invisible islets whose sandy levels are all but awash. I know not how many craft ply on Lake Burullos, but the tale must run into hundreds and that of the fisher folk to thousands-the latter of a blond type dignified with some of that energy and reserve which are seldom altogether wanting to men whose business is on great waters. had neither opportunity nor occasion to study them closely, but received a clear impression of their racial antiquity. The general type of features seems to be that sharply marked and over refined sort which one associates with an old inbred race, and the women often reminded me strongly of the characteristic type on the Egyptian monuments. An anthropometrist might find not a little to interest him in this remote and secluded corner of the Nile Valley.

The new land does not begin to rise on the north-eastern horizon till a dozen barren islets have slipped astern.

First emerge the higher dunes, uplifted in a shimmering mirage, rose and yellow like low cumulus clouds touched by sunset. These run one into another till they become a continnous range, spotted with black tufts, which are the plumes of half-buried palms. A cluster of huts to left with certain upstanding blocks is the village of Borg, with its dismantled fort and coastguard station, situated on all that remains of the Sebennytic estuary of the Nile. A rank odor of curing comes down the wind, for there are dried the putrescent fish on which half the poor of Lower Egypt live. To right and ahead, as you wear round the last island and set a course due east, a large dark stain resolves itself into a little town with a minaret or two set on a hillock and backed by the golden dunes and the palms. A forest of naked masts and yards lies out on the lake; it is the fleet of Baltim, the chief settlement of the Burullos fisherfolk, and old episcopal see of Parallos, whose sound, corrupted on Arab lips, makes the modern name.

So flat is the lake floor that a great way from the margin the water is still but inches deep, and the grounded feluceas discharge their freight on to the backs of camels, which are trained against Nature both to receive their loads standing and to plash unconcerned a mile out in the inland sea. So far out also as to be dimly seen, naked children roam all day and every day, plying in either hand tiny javelins or little casting-nets, fishing as their first forefathers fished; and I have seen no healthier or happier babies than this amphibious brood, whose playground is the lagoon. The fathers and mothers also seem to pass their days al fresco on the great expanse of sandy beach, coopering boats, buying and selling fish, chattering, sleeping in the sun. It is astonishing in Egypt to see any life so clean. Here

is no longer the Nile mud, a viscous ink when wet and a fouling dust if dry, but the purest ruin of calcareous rocks. Even the huts are not claybuilt, but of ancient Roman bricks dug out of the mounds that lie to south of the lagoon, and long ago mellowed to a dusky red which harmonizes to admiration with the yellow dunes and the palms. Less solid beehive shelters, byres, and fences are plaited of dry palm-fronds.

It is a most singular bit of Egypt, this long sand-belt, which fences the northern sea-made, for the most part, one must suppose, of the detritus of a barrier range of prehistoric islands, themselves compact of such a soft limestone as that on which Alexandria is built. Coming into it out of the great Nile-flats, one thinks it a veritable highland, and climbing painfully over the sliding dunes hardly notes that every deeper hollow falls again to the Nile level. Yet so it is; and therefore palms may be planted deep, and they will bear abundantly, though the dunes, in their constant eastward progression, bury them to the spring of their plumes. In the troughs of the sand-waves potatoes and tomatoes are grown behind long alignments of sheltering wattles; nor is a wild waxy pasture wanting, whose roots trail to incredible length, even to fifty or sixty feet, through the sand to seek the ground moisture which somewhere will not fail them. You may find a similar tract by taking train from Alexandria towards Rosetta, and see a village like Baltim in Edku by its lake: but there is no view west of the Nile to rival that from the higher dunes of Burullos; nothing like that great forest of sand-choked palms in the hollow that lies between the lake dunes an l the higher golden range by the open sea; nothing like the ample prospect of the Lake Burullos itself, with its northern fringe of fisher-settlements, its beach alive with fishing-folk, and its waters dotted with their hulls and sails. It is no longer familiar Egypt, as one knows it, but a land of even more primeval life and even less change.

The agents of change, however, are abroad, and the time is not far off when the limits of cultivation will be pushed northward as far as the southern shores of the lake. That is as far as they were pushed eighteen hundred years ago by Imperial Rome. perhaps the time is not so much farther off when the lake itself will be cut off from the sea and its bed drained and parcelled out into arable plots, suffering the same change that in the past ten years has come over the lagoon of Aboukir and now threatens that of Edku. The severest critics of British rule in Egypt admit that at least it has resulted in certain ameliorations of the lot of the agricultural The Cornbill Magazine.

Egyptian-in his having better security of tenure and a larger enjoyment of the fruits of his labor. Nor, again, is it denied that we are improving his food and the sanitary conditions under which he has to live. We may fairly take credit, then, (if credit there be) for two consequences of these ameliorations-for the steady increase in population and the obvious growth of a land-hunger among the people. one is pushing a growing proportion of the fellahin out of their native villages, the other inducing the surplus to make, not for the towns, but for the unappropriated arable lands. The vacuum which sucks that surplus nowadays is the Northern Delta. There alone, in the strait and teeming valley of the Nile, is yet room and to spare; and there will be seen in the near future the greatest expansion and modification of Nature by man.

D. G. Hogarth.

SONG.

And it's whither away is the Spring to-day?

To England, to England!

In France you'll hear the South wind say,
"She's off on a quest for a Queen o' the May,
So she's over the hills and far away,
To England!"

She's flown with the swallows across the sea
To England, to England!
For there's many a land of the brave and free
But never a home o' the hawthorn-tree,
And never a Queen o' the May for me
But England!

She is here, she is here with her eyes of blue, In England, in England! She has brought us the rainbows with her, too, And a heaven of quivering scent and hue, And a glory of shimmering glimmering dew, And a lily for me and a rose for you, To England!

And round the fairy revels whirl
In England, in England!
And the buds outbreak and the leaves unfurl,
And where the crisp white cloudlets curl
The Dawn comes up like a primrose girl
With a crown of flowers in a basket of pearl
For England!

From "The World's May Queen."

Alfred Noyes.

THE FUTURE OF AIR-SHIPS.

I.

Suppose that I consider it quite possible to visit the North Pole in an airship? Suppose I predict that at no distant date aerial cruisers will threaten fleets, make war on submarine boats, and stampede army divisions?

Suppose I tell you that I hope, as early as the coming summer, to give something to the impetus remaining needful to the aerial effort that will bring such things to pass in Europe? That I fully expect, before the particular experiment be finished, to go cruising for a week at a time over Europe in an air-ship that will not need to touch earth each night because it will be in itself a floating house?

You might reply that such looking into the future is easy. But looking into the past is also a kind of looking into the future. When eight years ago I first proposed to attach an explosive petroleum motor beneath a balloon filled with inflammable gas, the world cried out against the project.

After I had proved the safety of the automobile motor in the air, I declared that I would build an air-ship capable of making steering-way against moderate winds. I was at once accused of being as ignorant of mechanics as of aeronautics; the elongated balloon would double on itself; and the system would be carried off by the first breeze. To add to the discouragement, the balloon of my second airship did double on itself, and I was carried by the wind from the Jardin d'Acclimation to the Plain of Bagatelle.

Years passed. I built other air-ships. I navigated over Paris; I made evolutions above the Champ de Mars; I accomplished trips to points indicated in advance; I returned to my starting-points. In a word, I enjoyed great pleasure in my air-ships, which I saw to be practical. Yet the accusation that I would be helpless in the wind pursued me; and I heard it from so many authoritative lips that it is a wonder I did not come to fear it my-self—such is the world's power of suggestion over the individual.

Then I navigated the air between St. Cloud and the Eiffel Tower against a time-limit believed to be prohibitory—not once, but twice; not twice, but three times. On October 19th, 1901, I made the eleven kilometres plus the turning of the Tower in 29 minutes 30

seconds. Was it done in a profound calm? No; the Central Meteorological Bureau reported, at the moment of starting, a south-east wind blowing six metres per second—twenty-one kilometres per hour—at the altitude of the Eiffel Tower.

At Monaco in the early part of 1902 I dealt so continually with the wind that I was never able to make a satisfactory estimate of my speed. and down the Mediterranean coast I sped, sometimes accelerated, sometimes retarded by the wind; and so I came to look on the entire wind-problem as simply one of plus and minus as to speed and of the toughness of superposed silk and varnish with respect to pressure; and my strongest impression of those Mediterranean flights remains that I rejoiced, laughing to see how I outsped and left behind me the steam-chaloupes and petroleum launches that ought to have accompanied me to pick me up in case I fell!

Everything I have thus far accomplished has become commonplace. It is known, it has been seen, it seems natural, not unusual. But let us not forget that the commonplaces of 1902 were the impossibilities of 1898.

I said this to myself. I had tired of straining for speed to gratify the curiosity of others; and so I permitted myself to take some aerial amusement. I built my little "No. 9," in which, day after day, I hopped over the trees of the Bois, kept appointments to lunch, attended a review, and guideroped down the Avenue des Champs Elysées to my door at the corner of the Rue Washington.

That was one kind of air-ship. Had I at that moment predicted that, within two years, I would go on aerial pleasure-cruises of a week's length, accompanied by friends whom I would lodge, feed, and keep warm, while they should sleep between the constellations

and the earth, and exult through golden afternoons spent gliding over Europe, I should have heard all the old objections—and some new ones.

II.

Why is it that no balloon has ever been able to stay much longer than twenty-four hours in the air, and that the world's record, made in a recent sensational contest, is not quite thirtysix hours?

It is because ballooning has two great enemies—condensation and dilatation. Suppose that you are at equilibrium at five hundred metres. Suddenly a little cloud masks the sun. The gas in the balloon cools and condenses, and if you do not at once throw out enough ballast to correspond to the ascensional force lost by such condensation, you will begin descending to earth. If you throw out too much ballast, you will become too light again and shoot up too high.

Imagine you have thrown out just enough. All goes well for a time. Then the little cloud ceases to mask the sun. Your gas will heat up again, and by its dilatation will regain its old lifting power; but, having less to lift by the amount of ballast just thrown out, it will dart higher into the air, where the decreasing atmospheric pressure will permit it to go on dilating until a lot of gas escapes through the valve with which every balloon is furnished. Otherwise the balloon would burst!

You have overshot your equilibrium and lost too much gas—because the balloon is an impetuous thing, always exaggerating. Therefore you will find yourself descending—to condense your gas again as the atmospheric pressure increases—when more ballast must be sacrificed, and the balloon shoots up too high again, and the trouble recommences!

The skill of the spherical balloonist consists precisely in maintaining his desired altitude with the greatest economy of gas and ballast; but, be he ever so exact, the time must come when repeated condensations have forced him to throw out his last gramme of ballast and repeated dilatations have lost him so much gas that the balloon sinks to earth—no longer spherical, but pear-shaped, with its lower part hanging flaccid.

From the earliest ballooning times, men have sought to combat condensation by means of heat. Montgolfier's first balloon was filled with nothing but hot air, which is lighter than the cool air of the atmosphere; and it has always been known that an adequate heating of one's gas would be equivalent to saving so much ballast.

Pilâtre de Rozier who, accompanied by the Marquis d'Arlandes, was the first in the world to make a free balloon ascent, finally lost his life in an attempt to cross the English Channel by means of such a contrivance in which heated air was to reinforce hydrogen gas.

Many methods have been since proposed, the latest and most logical being a plan which would allow steam to freely mingle with one's gas—the theory being that such steam will condense in drops on the inside surface of the balloon envelope, to be caught again without loss as they fall into a proper receptacle below the open vent at the bottom of the spherical balloon.

Nothing could be more logical or beautiful than this plan in theory; and the only reasons I have for refusing to adopt it in practice come from my own small experiments, which I do not claim to be conclusive. Only, so far as I have been able to experiment, the system would require me to take up too much water. The surface of the balloon is so great that the mass of the steam, instead of condensing and fall-

ing in drops as it ought to do, seems simply to disappear, to escape through the varnished silk, where gas itself cannot escape. At least this is what happened to me.

Yet such heating of one's gas is too tempting an idea to be abandoned, especially in these days of perfected petroleum fuel. With one kilogramme of petroleum I am promised by the manufacturers of my boilers and condensers that I can vaporize twenty kilogrammes of water. If I can devise a practical means for catching this water again as it ceases to be steam, the oft-studied problem will be solved. Imagine the balloon to be coming down -the result of gas condensation. Instead of lightening it by throwing out twenty kilogrammes of sand, I will have but to burn one kilogramme of petroleum! My twenty kilogrammes of water will become steam, itself lighter than the air, and whose heat will dilate my gas to such an extent as to produce thirty kilogrammes of new ascensional force!

At first I hoped that the thing could be accomplished by means of a small and very tight steam-bag sewed inside the balloon. I would lead my steam to it, there to condense and fall in drops which could be caught, by means of a tube. This steam-bag, expanding as it filled, would have at the same time served as an interior air-ballonet to aid in maintaining the balloon's form. Unfortunately no silk and varnish will resist steam, and after long experiments in which the steam reduced my steam-bags to a sticky mass, I hit upon my present condensers.

Why should I not lead from the boiler directly to a present-day aluminium condenser hung inside the balloon? It had never been done—but that is the distinguishing particular of all new things. Now I have done it. You can call it a condenser or a radiator; in fact, it differs little from the

radiator of an automobile in construction or function, though its object is to heat instead of to cool. It consists of half a kilometre of very thin aluminium tubes disposed vertically in the form of a hollow cone, the whole being suspended inside the balloon from its top.

Now imagine the balloon to be in the air-and coming down as the result of gas condensation. I simply turn a faucet, and steam immediately generated by a remarkable little up-todate boiler begins mounting to the condenser and rushing through its half a kilometre of tubes. This steam cannot possibly mingle with my gas, yet it heats it, re-dilates it, and gives new ascensional power to the balloon. Indeed, the radiation of the half kilometre of tubes is so complete that the steam ceases to be steam before it has traversed their whole length. So it immediately drops out at the other end in the form of water again!

Now you see what happens. Interrupted at will by the play of the faucets, I keep my twenty kilogrammes of water in a continuous circular movement of water, steam, water, steam, water. The twenty kilogrammes (or more) of water remains always a part of the original weighing of the balloon; yet each time I send it round the circle, at the cost of one kilogramme of petroleum fuel, I gain temporarily thirty kilogrammes of ascensional force; and, thanks to the play of my faucets, I can graduate this force at will.

I repeat, I gain thirty for one—thirty kilogrammes of ascensional force for one kilogramme of petroleum ballast. Therefore—it seems clear to me—if the ordinary spherical balloonist can stay twenty-four hours in the air with a given quantity of sand-ballast, I shall be able to stay thirty days in the air with the same quantity of petroleum ballast.

III.

The balloon envelope of this aerial yacht—as I may call it—is being sewed. Its car is already built. Its boiler and condenser are being constructed. Its motor is ordered. Its propellers exist. And very soon the aerial yacht will start on its first cruise. In appearance it will more resemble the preconceived idea of a twentieth century air-ship than anything heretofore produced.

Beneath an egg-shaped balloon. slightly less elongated than the balloon of my "No. 9," will be seen hanging what looks like a little house with a balcony window running half its length on each side. The balcony window will characterize the open, or observation, room of the floating house, or car; and in it the motor will have its place. Behind it is the closed sleeping and reposing room; while in front of it you will see an open platform holding the steam-producing boiler. From it steam can also be led. by means of a pipe, to the open room for cooking and to the closed room for heating purposes when needed.

As the floating house is designed to remain for days at a time in the air, protection from the cold, even of moderate altitudes, may become impor-Therefore the closed room can tant. be made quite tight, to retain heat, it -like the whole of the car-being composed of a framework of pine, aluminium, and piano wire tightly covered with varnished balloon silk of many thicknesses. It will contain two cot You may ask what will the beds. guests do while the captain sleeps? The whole idea of the aerial yacht is contained in the answer.

My guests may remain at ease while I take my turn at sleeping. The aerial yacht is not designed for high speed. Therefore its balloon need not be cylindrical. I am even making it eggshaped; consequently the skilled la-

bor and unremitting attention required for the maintenance of a cylindrical form by means of interworking ventilators and valves will not be needed. In this respect, indeed, the aerial yacht can, for hours at a time, be made to resemble very closely a spherical balloon, its motor being stopped, and the system being allowed to float gently through the night—or afternoon or morning—on a favorable air current. The labors of my guests will be limited to a common-sense opening and closing of a faucet as the balloon obviously falls or rises.

We shall do a great deal of such re- . poseful gliding on favorable currents, floating onward at no great height above the earth, but utterly free from the guide-roping nuisance. For us there will be no darting up into the frigid solitudes above the clouds, no falling into dank mists-after the fashion of spherical balloonists. Nor will there be the strain for speed, or the pressure preoccupation incident to ordinary air-ship flights. A proper handling of the faucets will secure us the level altitude we desire; and we shall float on, watching the great map of Europe unroll beneath us!

We shall dine. We shall watch the stars rise. We shall hang between the constellations and the earth.

We shall awake to the glory of the morning.

So day shall succeed to day. We shall pass frontiers. Now we are over Russia—it would be a pity to stop—let us make a loop and return by way of Hungary and Austria. Here is Vienna! Let us set the propeller working full speed to change our course. Perhaps we shall fall in with a current that will take us to Belgrade?

And now that it is morning again, let us ride on this breeze as far as Constantinople! We shall have time, and shall find means to return to Paris! IV.

The obvious advantage of an eggshaped, dirigible balloon under slight interior pressure, and furnished with my steam heating system is, of course, its ability to remain thirty days in the air where the ordinary spherical balloon can stay but one day.

Had André possessed it, he might have started off with serious hopes of crossing the Pole on an air current, and being carried to civilization in the opposite hemisphere; therefore I see no reason why such an aerial yacht, built for the purpose, should not reach the Pole and get back safely. An Arctic exploration steamship could carry it to the farthest possible point North; and there, on the deck of the steamship, it could be inflated and sent off to make the few hundred kilometres remaining between it and the great goal.

I have always been attracted by the idea of reaching the Pole in an airship. When one considers the very few hundred kilometres remaining to be conquered, it seems annoyingly unpractical that an aerial machine, capable of racing against a time limit in the teeth of a wind blowing twenty-one kilometres per hour, should be baffled by them. To have recourse to speed would have been my first idea, actually proposed by me in my book Dans VAir:

"Some day explorers will guide-rope to the North Pole from their ice-locked steamship after it has reached its farthest possible point north," I said. "Guide-roping over the ice-pack, they will make the few hundred kilometres to the Pole at the rate of from fifty to sixty kilometres per hour. Even at the rate of forty kilometres per hour, the trip to the Pole and back to the ship might be accomplished between breakfast and supper!"

I would now, nevertheless, prefer to

rely on time rather than on speed, and trust the adventure to one of these aerial yachts, built for the special purpose.

Experience that will have to be gained by many cruises in my pleasure yacht would teach us how to build, equip, and handle a stronger and more powerful one adapted to Polar exploration. The size of the balloon would have to be calculated in proportion to the long duration of the cruise, the thickness of the envelope, the quantity of petroleum and stores, the capacity of the steam heating system, and the force of motor and propeller.

I have said that my aerial pleasure yacht will have no great speed. Probably it will not exceed fifteen kilometres per hour. What propeller speed ought to be given to the Polar yacht would be a question for calculation with many elements; but I concede in advance that it might be carried away from its course.

It might be carried from its course; but having, let us say, from thirty to forty days in the air at its disposal, it could always start due north again with its propeller the moment it had found a region of comparative calm. Note, it would have no need to retrace its course after such a blowing aside—it would simply try to start due north again!

When it found a northerly air-current—either by accident or by hunting for it vertically—it would immediately stop its motor, in order to waste no fuel. Indeed, its propeller-force ought to be exerted only in two cases, for two great uses: (a) to push on straight to the Pole in every period of calm, and (b) to modify the air-ship's course when riding on a more or less favorable air-current.

Such are the two vital advantages of the agrial yacht not enjoyed by André in his balloon—its ability to re-direct its course due north, and time to wait

for opportunities to so re-direct its course again and again and again. I will not dwell on the vital comforts of a heated cabin: but to me it is obvious that the closed room of the Polar yacht ought to be constructed very close, to hold all the heat its captain could give it. Its walls of many thicknesses of varnished silk enclosing both motor and boiler might save the expedition; for, apart from the adventure of André, this would be the first time for men to affront the cold of the north without the resources of continual violent exercise. Indeed, I have · often asked myself if André and his companion did not simply perish from cold!

Or—another supposition—did it never occur to you that the tragedy of the André expedition might have been due to his balloon descending to earth in those far northern regions? Who knows what practical effect of condensation the intense cold might have had on its gas? A single descent to earth might have occasioned the loss of a great deal of gas. To rise again might have cost André a dangerous loss of ballast; and he would have started off again crippled in both these vital means!

Should the aerial Polar yacht be obliged to descend to earth, its captain could accomplish the manœuvre by merely turning a faucet and allowing the intense cold to condense his gas. To rise again, he would simply re-heat his gas.

V.

When the secret history of the Russo-Japanese war comes to be known, the submarine-boat will probably be found to have played a decisive part in the destruction of the first Russian Navy.

It is astonishing how quickly we habituate ourselves to revolutionary inventions. Up to the moment they burst on us as successes, we condemn them; then we accept them nonchalantly, as something natural.

A few years ago the submarine-boat occupied the same category as the airship in our consciousness; and it is only yesterday that a British submarine-boat drowned its entire crew while under cautious experiment in protected waters! Yet there are few who doubt to-day that hostile submarine-boats rather than inexplicable carelessness with respect to their own mines destroyed the Russians' men-of-war and cruisers.

So it will be with the air-ship in war. The first successful one has but to appear, and the world will forget all its unfavorable judgments. And should the first one to appear be accidentally unsuccessful? I answer that, in such case, the world will probably have to wait a little longer for the There are inventions that surprise. have luck, others that have less: or is it simply that we are prone to overlook the small beginnings of the successful ones? The submarine-boat has, for the moment, distanced the air-ship -but in the end it is the air-ship that will be its master!

I have no doubt of it—the twentieth century air-ship is bound to become not only the unique enemy but the sensational master of the twentieth century submarine-boat—and this for a very curious reason, depending on certain optical laws not at all taken account of by the inventors of either!

It is now a well-observed fact that the occupants of balloons and airships floating over the surface of the water are able to perceive bodies moving beneath the surface of the waves, to a depth and with a distinctness that is marvellous.

In view of this one fact, imagine the case of a fleet threatened by sub-marine-boats. Without the aid of an aerial cruiser, it must remain as help-

less as were the magnificent Russian war-ships in the harbor of Port Arthur. Protected by an aerial cruiser, observe how its chances change! The air-ship will be seen moving over the waves in long, parallel lines. Beneath the surface of the water moves the submarine-boat. Its speed is little in comparison with that of its adversary in the air. It cannot even perceive that the air-ship is threatening it without rising to the surface at great risk; and it can profit by the knowledge so obtained only by diving to depths in which its usefulness becomes nil.

In a word, the submarine-boat can do no harm to the air-ship; while the latter can discover the submarine's presence, indicate its position to warships, and hurl down on it long arrows filled with explosives, and capable of penetrating the waves to depths impossible to gunnery from the decks of men of war or cruisers.

In that day the nation that has submarine-boats and no air-ships will find itself in a ludicrous position. Instead of being able to protect its fleet of warships with its submarine-boats, it will be obliged to protect its submarine-boats with its fleet!

Can you not see small air-ships used as scouts over both land and sea? You reply that they will be shot at by the enemy. Certainly they will be shot at—and now and then be brought down to earth; such is the fortune and the cost of war, which sees costly artillery abandoned, stores deliberately destroyed—and war-ships sunk! But other air-ship scouts will obtain information that may decide a campaign.

There will be air-ships and air-ships, small and large, for different uses. In my imagination I see one of the great aerial cruisers of the future; and lucky will be the army or navy that is first privileged to use it as an auxiliary!

Being constructed with the resources of a nation, and designed for moment-

ous uses, it will be enormously stronger and more powerful than my "No. 7," whose sharp elongated form it will nevertheless adopt for the sake of speed. I will suppose it to have a gas capacity of 77,000 cubic metres, to give it a lifting power of ninety-three tons. This is no fanciful picture. I have long and carefully calculated these specifications, and they are in due proportion to each other.

For example, there must be an intimate connection between the capacity, shape, and strength of its balloon, the speed at which it is to be driven by its motor and the weight of the crew, fuel, munitions, and permanent furniture it is to carry.

The balloon ought to be two hundred metres long and twenty-eight metres in its greatest diameter. would be propelled through the air by thirty propellers, each worked by a separate petroleum motor of one hundred horse power. This would give a total of three thousand horse power, sufficient to impart to the air-ship a steady high speed of as much as one hundred kilometres per hour. To withstand the exterior and interior pressure corresponding to such speed, the balloon envelope ought to be composed of twenty-six 'thicknesses of Lyons silk properly superposed and varnished.

With a balloon of such lifting power, enough fuel could be carried to make one thousand kilometres at full speed, or from three to four thousand kilometres at reduced speed, and there would remain enough lifting power to carry a crew of twenty men and a supply of explosives to be hurled at the enemy by means of one or two cannons genre lance-torpille à l'air comprimée.

Such an aerial cruiser would have nothing to fear from the wind. With its high speed of one hundred kilometres per hour it could make its way tranquilly in the stiffest breeze; and when not in use it could be held close to the ground, practically out of the wind's reach, by a hundred cables.

Doubtless in future wars on land and sea the great aerial cruisers, with their crews, will be brought down like simple little air-ship scouts. It will happen less frequently because of their speed, the vigilance of their numerous crew, and their terrible offensive power. But are not whole sea fleets destroyed in war? Did the Russians give up the sea because of the destruction of their warships in the harbor of Port Arthur?

I concede that air-ships may be shot at and hit; yet it will not follow because they are hit that they must fall like a stone; "full speed ahead" commanded after the fatal puncture will take the wounded aerial craft far from the scene of its wounding. I concede that they may be shot at, hit, and even be brought down; yet the French and English officers who watched the Boers shoot day after day at the captive balloon that rose above Ladysmith have ideas of their own about the practical difficulties of thus bringing down a bag of silk filled with gas.

I concede that air-ships may be destroyed in war; but, at the worst, remember that the crew of a great aerial cruiser will not contain a tenth of the crew of a war-ship; that its construction will cost far less than a tenth in both money and time. Yes, air-ships will be destroyed in war; but reflect also how quickly a 20,000,000 francs war-ship may be sent to the bottom of the sea by dropping a moderate quantity of dynamite on the middle of its deck!

VI.

How soon are we to enter on the Air-ship Age? Probably the great change will come rapidly; once let an air-ship reach the Pole, once let an aerial cruiser make some action d'éclat in war—and within an astonishingly short time you will see hundreds of air-ships gliding overhead. The great change will have begun!

Hundreds of engineers and mechanicians will begin competing with each other in the improvement of aerial craft, copying from each other, improving on each other, racing with each other, exhibiting side by side in Air-Ship Salons. Factories will be devoted to air-ship construction, and the models of each succeeding year will be more practical—by reason of the experience gained by a thousand experts in every-day competitive experiment.

At the beginning it will be as it was with automobiles when they bore no numbers, when no chauffeurs' certificates were issued, and when the amateur going out for a spin was tolerated as an exception in one sense, and as a pioneer of French industry in another.

Month after month more air-ships will be seen manœuvring over Paris; but as they will not frighten horses, will not run over pedestrians, will not congest traffic, will not pollute the air of Paris with their odors, there will be less crying against them than you might imagine.

Oh, yes, there will be certain complaints against them. Now and again an air-ship, either by design or accident, will come down in the street—by preference in a wide avenue. Crowds will collect around it. Now and again—not often—one of them will fall with painful, but not necessarily fatal, results.

There will be discussions. A portion of the population and Press will take sides against the aerial movement. Others will defend it, if only in the interest of French industry and of Paris as the world's centre of novelties: for Parisians will be once

again ready—as they have always been ready—to make greater concessions than other cities to maintain the reputation of their brilliant capital as the "Ville Lumière," the enlightened pleasure-city of the world, the capital of new sights and sensations!

Little by little these very accidents and interruptions of street traffic will force certain topographical changes on Paris.

The air-ship people will demand landing spaces.

They will say: We ask nothing of the street. We do not benefit by your expensively maintained avenues. If you will accord us landing spaces, we will keep to them; and you will have no further trouble from us.

Thus the first landing spaces will be conceded—wide open spaces like parade grounds, free from trees, buildings, poles or fences, to which the airship captain may steer his craft in case of accident or desire to alight.

At the beginning they will probably be parts of already existing public squares; but the topographical change will have begun. Little by little the landing spaces will have to be made in every part of Paris; and when they begin to be constructed on the tops of houses, the second part of the topographical change will have begun.

Whether or not we who read these lines will ever mount in lifts to spacious platforms in the air to wait for the aerial craft to come and take us, will depend, I fancy, on how much the aeroplane principle will be found able to serve us. Dirigible elongated balloons, even when neither heavier nor lighter than the air, are accommodating craft, perfectly capable of mounting from landing spaces on the Aeroplane air-ships, on the ground. other hand, may find vital advantage in coming to, and especially in starting from, heights.

I have no objection to aeroplanes

furnished with motors; and there are even certain forms plus lourds que l'air, which I regard as eventually possible, if not probable. Indeed, were I, Santos-Dumont, to find myself at the head of a great experimental air-ship station with unlimited material and workmen at command. I would be immediately found constructing, side by side, a dozen different types of aerial craft, being convinced-as I have ever been convinced-that practical experiment must be our only true guide in the air. If, in my own modest experiments, I have thus far held to the elongated balloon, it has been uniquely from my desire to navigate the air at once, without delay, for my own pleas-

There may be aeroplane air-ships with great fixed wings, which will permit powerful motors to propel them, skimming through the atmosphere. The proportion between motive force and surface may be satisfactorily arrived at; the natural laws of the sizes of such aeroplanes, either simple or combined with balloons, may be discovered. And so quickly do we become habituated to new things, the day when aerial omnibuses begin carrying tourists and business men from Paris to St. Petersburg, you and I will take our places in them as naturally

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as our grandfathers took the first railway trains.

Then, in addition to the surface landing spaces and the elevated landing stages of the smaller aerial craft, new and highly-organized aerial line stations will complete the topographical change.

They will resemble the termini of railways only in so far as they must have waiting-rooms, restaurants, bars and cab-ranks on one side, and traffic halls, machine shops, gas plants, and a lot of parallel railway tracks on the other. The railway tracks will be for the accommodation of small trucks and locomotives used in the manœuvring of waiting air-ships—for an air-ship on the ground is as clumsy as an eagle!

As clumsy as an eagle! The other day I stood looking at an eagle flopping on his branch in his cage at the Jardin des Plantes. And as his clumsiness grew more and more apparent, I congratulated his Designer and Constructor that He had no mathematicians in frock coats and high hats at His elbow when He began His first experiments with the flying lizards. Their clumsiness and weight would have condemned them in advance as their clumsiness and lightness has condemned the first dirigible balloons!

Santos-Dumont.

THE MARRIAGE BOND.

Among those whose names appear in the obituary lists of 1904 was a man who had been affectionately known for two generations by a large and yet rather close circle of friends. Of a retiring disposition, which became more and more marked as he grew older, he had nevertheless a perfect genius for society, as was shown as often as he appeared in it. Nor was

there much difficulty in discovering what worked the charm. Gentle manners and bright and ready wits were less than half the explanation. An extremely sympathetic temperament brings us nearer to the secret; which is fully revealed when we learn that, instructed by sympathy, he brought all earthly righteousness into the simple formula, Social loyalty, social recti-

tude. To him, every thing was fortunate or unfortunate, right or wrong, according as it tended to strengthen, purify, and adorn the relations of society, or to deharmonize and degrade them. All the little obligations, courtesies, kindnesses that thread the social class to which he belonged were matters of moment to him. Much more therefore was he concerned with the stronger bonds that should run throughout the community as a whole, like the ties in the frame of a ship, and, above all, the elementary principles-fewer than the Ten Commandments, wherein most of them are embodied-upon which every social organism is built, if built to last. Christian or pagan, village or kingdom, they are its necessary foundation.

As we see every day, views like these may be held where they have but small effect on the character and conduct of the person who holds them. But Mr. -'s friends would say (we must give him a name, but are only allowed to do so by an alias)-the friends of Mr. Peters would say that in his case we have to speak of instincts rather than views. Reading and reflection only confirmed what was implanted in his nature. And these instincts being singularly capable of working into all the affairs and relations of life, from the least to the greatest, they were kept in constant operation. There was the same call upon them at the dinnertable as in the council-room, and from George Peters the same ever-ready response. Yet for all this, and the helpfulness in great and little things that was the consequence, it is likely enough that he would have been less "popular" without a certain eccentricity which was always amusing, though sometimes puzzling for a kind of daring innocence.

This last-named characteristic is not very uncommon, but it seldom endures beyond middle age. It remained a Peters characteristic to the last. In the same month in which he died—he being then near his eightieth year, though he did not look it—his innocent daring planned and carried out a little adventure odd in itself, and yet more odd for having never been heard of. For it had to do with certain literary and social developments which are never long out of public discussion, and though quietly managed was yet no secret.

Mr. Peters, it seemed, had acquaintances among the members of two or three of the Ladies' Clubs established in London lately, and whether through these or after a round of visits to the club secretaries, he was furnished with the names of members who were likely to accept an invitation to meet at his house one afternoon for the discussion of "a matter of urgent public interest." Though his urgent subject-matter was not explicitly stated, it was not beyond inference from the terms of the invitation, if we may judge by a draft of it among Mr. Peters's papers. We may also infer that the invitation was addressed to fewer than a dozen ladiestwo or three in this club, two or three in that-all known as taking an active interest in the improvement of the race by extending the liberties and enlarging the opportunities of Woman, No one, indeed, seems to have been asked to confer without evidence that she had gone somewhat deeply into the subject-socially, analytically, psychologically, and otherwise; from which it may be gathered that a considerable proportion of the invitées were novelists, or endowed with the genius which so often shows itself a maturing quality. None of these ladies had the least difficulty in making out Mr. Peters's credentials, of course, or in ascertaining that a conference might be as properly attended at his house as at any bishop's.

And, apparently, there were no re-

that could have been called unpunctuality. On a summer afternoon all who were invited met in Mr. Peters's library-as large an apartment as his drawing-room, and more fit for the occasion. There were no introductions. Mr. Peters had even instructed his butler to avoid the presentation of cards as much as possible, so that when our aged friend entered the room-which, taking advantage of his ancientry, he deferred till most of his guests were assembled-he could not have named any one of them with certitude. His idea seems to have been that there should be only the least acknowledgment of personality at this little meet-He had to introduce himself, however; and so, making them a beautiful bow at his first step into the room, he told them that he was the temerarious person who had trespassed on their leisure upon no better warrant than some fears-idle fears, perhapsof a public mischief.

The meeting noticed that Mr. Peters brought into the room with him a small book, which would have looked quite unlike anything on his library shelves even if it had not borne one of Mr. Mudie's yellow labels. This book was still held firmly in hand while Mr. Peters assisted his butler in redisposing chairs at convenient distances from a table upon which a regale of choice fruits was set out. If the rather common-looking little book had been laid down but for three seconds, an intense curiosity, which, as Mr. Peters afterwards said, "spoke through the silence that veiled it," would have satisfied it-"What novel? Whose?" This was the question in every eye-a question presently answered.

Opening the book and running a somewhat disrespectful thumb across the edges of the leaves, Mr. Peters began by venturing the presumption "that a novel so warmly praised and

fusals, no abstentions, even nothing that could have been called unpunctuality. On a summer afternoon all who were invited met in Mr. Peters's library—as large an apartment as his drawing-room, and more fit for the occasion. There were no introductions.

Mr. Peters had even instructed his butler to avoid the presentation of cards

Affirmative answers came from all sides, but with a noticeable hesitation. Mr. Peters, it seems, looked up rather questioningly at this, whereupon a writer whose own works are more philosophical than romantic explained. She said that although some plausible reasons might be adduced for doubting whether the book was written by a woman or a man, the authorship had been described correctly . . .

("Up to a certain point," a sweet young voice said modestly.)

"Described correctly," the other voice repeated. "It happens, however, that the remarkable production which you hold in your hand is itself additional evidence that there is no such thing as sex in literature. It has been triumphantly shown of late that all that is at the same time masculine and admirable in the imaginative works of men can appear as naturally and as strikingly in the similar work of women. And if yet more recently a real George or John or Richard"-here the lady pointed to the Mudie book-"can write of the inner mysteries and experiences of human nature as a woman might, evidence the more that literature, like art, knows no sex."

This little speech was received with warm applause, though not quite unanimous.

"Then, if that be so," said Mr. Peters, "one of the questions that I wished to put to you is already answered. This novel, as you know, is little else than an exposition of the inner mysteries and experiences of human nature in its least-known half. At

any rate, that is its pretension; and every review of the book that has fallen in my way congratulates the author on his astonishing acquaintance with the heart and thought of woman, as expanded in these more free and generous times. Of course I could see that he wrote with all the confidence of perfect intimacy; and yet, to confess, I doubted whether the reviewers were any more competent to judge of his superiority in this line than I myself. Indeed, I thought it not unlikely that a jury of women, themselves students of human nature, might reject this gentleman's pretensions as an expositor. That seems to have been a mistake. I now understand that the reviewers have done him no more than justice. When he writes of womenor perhaps I should say of ladies, to be quite fair-he does so as an intelligent and honest woman might."

(Movement.)

Mr. Peters then went on to say that had the answer been different he should have troubled them with nothing more than a petition; a petition that to the utmost of their opportunities—great as they were for all who wielded the magic of the pen—they would make known their want of sympathy with much that Mr. — had an unmasculine kindness for. As it was, he hoped he might be allowed to speak a few words on a matter of delicacy but of great importance.

(Permission indicated by a gentle rustling into easier attitudes.)

"Chapter one hundred and fifty-three," said Mr. Peters, opening the Mudie book. "Chapter one hundred and fifty-three and a few preceding pages." But observing about him a startled movement of uneasiness—for this was the great chapter—he closed the book and flung it aside.

He had no intention, he said, of reading a word of it, and only named that chapter to call to mind the assumption

which the whole story hung upon. At the same time, he was sure they would understand that it was not because this assumption vitiated a particular novel that he gave importance to it, but because its apparently delicious poison ran through so many of the most attractive novels of the day. And not in the most attractive novels alone. It animated innumerable fireside tales. It was the basis of large quantities of essay on the miseries of stifled soul and the sacred duty of living one's own life. Far be it from him (Mr. Peters) to deny that such miseries were often real, or to insist overmuch on the sacredness of the duty depending a good deal on the sort of life proposed. But as for the assumption that ran through all this literature, they must agree with him that it was utterly, inexcusably, even stupidly false.

Now arose some pretty, petulant cries of "But what assumption, Mr. Peters?"

"What assumption? That marriage is not bondage!" he answered warmly; a reply which at once provoked laughing exclamations of "Why! don't we assume that it is?" "I think not," said Mr. Peters, at which there was an end, pro tem., of all decorum. Every variety of surprise had expression in the laughter that circled round the Chair, as Mr. Peters might be called, and in the clatter of amused comment which the ladies shared among themselves.

These pleasant sounds were still rippling out into the infinite when they were chilled and checked by, "I think I know what Mr. Peters means. He means that we give a bond a bad name and break it."

Spoken in the same innocent voice that had been heard a few minutes before, this was said by the youngest of the bevy to a friend near her. But the voice was such, so fine and clear it was, that everybody heard; with the consequence that nine pairs of coldly scrutinizing eyes were turned, not upon the young lady, but on the delighted convener of the meeting.

With a bow in the right direction, Mr. Peters declared that, left to himself, he could not have expressed his meaning in ten times as many words: his meaning so far, that was to say. They would now, perhaps, allow him to go a little farther in explanation.

"I say that marriage is bondage. You reply that you say so too. In so saying you appear to think of this bondage as do the new-fashioned novel-writers; of whom I complain that they represent the marriage bond not as it is but as very positively it is not. The novel which I have recalled to your minds as an example of the new but by no means the good, could never have been written—"

"Not the work of a woman," interjected the lady who had already testified to that effect.

"Nor of a man," the younger one continued, simply and sweetly.

"My own ambiguous opinion, Miss Armida," Mr. Peters added, giving the young lady a name. "Could not have been written, I say, upon any other view of marriage than as a bond that does not bind. The author of this story" (tapping the Mudie book with a paper-knife) "would probably answer that he does not choose to recognize a relationship which has no existence unless as a superstition or an outrage."

("So obvious!")

"The idea is, in short, that there can be no such bond in reality because there ought not to be; that, as construed by the laws of liberty, the claims of human dignity, the inalienable heritage of the Me in Myself, and various other postulates no less sacred, the marriage bond is nothing but a conditional obligation."

("Certainly.")

"Further, that only the Individual can be the judge of how far obligation may change its obligatory character at any particular time or in any special circumstances. For no one else is able or has any right, for example, to appraise the misery of discovering that the obligation was from the first a 'dreadful mistake.' No one else is capable of hearing the call from soul to soul which awakens all the torment of the tie to dulness, commonness, unappreciation. Or perhaps the husband may be suspected, may be guilty, of making love where he should not. Then arises the Natural Equality question; which, however, is only advanced to justify one failing, one gratification-infraction of the marriage bond. So far as my reading in this kind of literature goes. when the husband takes to drink the wife may possibly do so too; but never in assertion of the rights conferred upon her by an equal endowment of human nature. The same remark holds good of all other derelictions but one. That one affects the bond. The husband being grievously suspect (guilt enough in some cases, apparently), the wife takes up her freedom as a matter of course, and makes a midnight assignation with a man who has informed her with his eyes that he intends to add her to his conquests. Or- but need I go on?"

"What do you think, Mrs. Alpha Beta?" This was Miss Armida's question. "We know it all. It is all in our books and our bosoms."

Without so much as looking at her questioner, the lady so addressed said, "It would be convenient, perhaps, to know whether the observations we have just listened to are to be considered as a criticism or as an exordium. If criticism—"

"Both," was the reply. "My desire is—I wish I could say hope—to impress upon your influential minds this: that the ideas of the marriage bond which have been slightly but sufficiently touched upon are the precise opposites of what they seem to be taken for. They are understood by the pupils of the circulating library, I believe, to be civilized, progressive: quite a mistake. They are retrograde and decivilizing. Return with them much farther, and the original monkey will come into view."

"The marriage bond, you would say" (this was a new and very gentle voice), "is or should be a bond indeed. The right view of marriage is that it is literally and properly a state of bondage."

"Certainly; but with the ignorant and vulgar expression of enslavement wiped from the word. It is an unfortunate word, which, being ill-used, becomes unfortunate for those who wrong it. It was no more likely to be misconstrued when first applied to marriage contract than when used in other affairs. But now a meaning has been imported into the word which gives to the marriage relation a false and dissolute character; marriage being in pure and simple fact a bargain."

"Bargain? And not degrading?"

"More it may be if more is brought to it; and there is hardly a nameable virtue-say, sweetness, goodness, or blessing in any form except such as derives from worldly prosperity-that may not be brought to the marriage bond, or that is not in innumerable cases. But, though marriage may be much more than a bargain, it cannot be less; and that, I beg of you to observe, is the point I would urge upon popular novelists like this gentleman, and like some ladies whose names are unconcealed though they cannot be answered to here. But even here-1 hope you will pardon these indispensable freedoms-even here, a moment ago, the exclamation was heard, 'Bargain, and not degrading?' The 'tyranny of words' is a favorite saying; the 'treachery of words' would be a useful variant. The marriage bargain degrading? Not till it becomes a fraud."

"But a bargain is barter," Mrs. Alpha objected; "and is there no degradation in bartering the most sacred affections?"

"With great respect," Mr. Peters said, "I fancy I see in such questions how a fallacy creeps in which is being nursed into something very much worse. The truth is, I believe, that these more sacred affections are sometimes capable of transference, in which case they suffer little injury. But in no case can they be bartered, being what they are, and barter being what Mrs. Alpha means. Where such affections existed before marriage, they may exist still. Where they come into existence after marriage, they may be either combated or cherished in uncontrolled and unvisited seclusion; and though the bond may then become afflicting, like many and many another of different kinds, it remains unbroken. Not the existence of these affections but their gratification violates a bond which is of equal sanctity, and of infinitely greater obligation than any that can arise from them. And now, be it remembered, we are speaking of the more sacred affections only."

These observations failed to give universal satisfaction, it appears. Mr. Peters's insistence on "bargain" was still warmly objected to as sordid, as dehumanizing, even as introducing commercialism into the domain of soul; and Miss Armida herself (who during these moments devoted her attention to a little selection of grapes in a plate on her knees)-Miss Armida came in for some very angry glances when he said in reply to these representations, "Ladies, honesty allows me but one answer, which I earnestly beg of you to ponder: Give a bond a bad name and break it. They might also remem-

ber, while on that ground, that all marriages were made on both sides upon an expectation of advantage. The purest love-match was made on that expectation; and if the gain in such cases was fulfilment of joy, all that could be said was that advantage was a very mild name for it. They need not be reminded, however, that, love-match or not, other advantages were rarely out of contemplation, or at any rate out of the bond. He had heard more than once that afternoon, and did not complain of it, that he regarded the marriage-bargain with the man's bias in favor of the husband. It might be so. In any case, the literature which was entirely reforming the popular idea of marriage took no account of the great, inalienable, lifelasting obligations which the one partner undertook, mainly in reliance that on the other hand a single condition would be faithfully observed. What he (Mr. Peters) meant by the inalienability of the man's obligations they well understood. When he spoke of their severity he was thinking of the hundreds of thousands of men in the trades and professions who spent all their days in labor and anxiety for little reward but food and clothing, if not for pleasures that would be whelmed in doubt and shame by what has been called resumption of the right of Woman to herself. In the meaning of that plea, or pretence, or whatever it should be named, there was no such right; and no woman was ever married in the belief that it was a right she could retain. Resumption of the right had passed of late under many fair embellishments, but embellishments wrought on a foundation of fraud. Where and how and why this work was carried on everybody knew; and considering what enormous numbers of men and women, but especially of women, read novels of all sorts but especially of certain sorts, and, reading little or nothing else, corrected their old-fashioned social and domestic ethics by them, he could but think that their authors should begin to consider what they were about. It was not simply a matter of domestic corruption. The marriage bond was one of the first and most necessary to hold society together. None was more expedient for the welfare of the community, none so productive of good and so preventive of evils; and it was the bondage of the bond, so to speak, that perfected its character.

The lowering of Mr. Peters's voice at the close of this little speech dropped indications that the proceedings might now be considered at an end. There was but little movement. however, for the same instant Mrs. Alpha Beta fell into whispered conference with the ladies nearest her. Evidently a few appropriate words in conclusion were contemplated, the duty of delivering them being naturally pressed upon the seemingly reluctant Mrs. Alpha herself. The consultation was too prolonged. It should have come to a settlement in ten seconds: at the eleventh it was engulfed "in the dark backward and abysm of time." For at that instant Miss Armida arose -a picture of modest serenity-and spoke as follows:-

She said she was sure her friends were unwilling to make an abrupt and thankless departure from that beautiful room, in which, little as it resembled a surgery, they had undergone a series of operations in every case beneficial, and in some cases, it might be hoped, amounting to much more. There had been times that afternoon, no doubt, when their benefactor's treatment of them resembled that which drew tears from the patients of the celebrated Dr. Abernethy; but, speaking for herself, she could only say that it met with her entire approbation. She strongly felt that no other

treatment could be of any use to them; and Mr. Peters might take it from her that every unsophisticated woman in that room shared this disagreeable but natural and not unhopeful feeling. (Polite intimations of disgust.) They were sensible, of course, that that was not a social gathering in the ordinary acceptation of the phrase. They were not there as a fortuitous concourse of the fair sex invited out to tea. She herself. Miss Armida went on to say. had always set her face, such as it was, against pretending to despise the conventional privileges of the petticoat. (Dear, dear!) That, she thought, was a mistake. But they were all aware when they quitted their homes that afternoon that they were expected to leave those privileges behind them,-in other words, were expected to play their part as if they actually were reasonable and responsible beings of the other sex. They were there as producers. They were there as traders in articles of their own composition, which, as every woman present knew from her own experience, were either inspiring or intoxicants-a food, a medicine, or a poison. In their own charming little coteries they made no difficulty of acknowledging that the most daringly pernicious parcels of this commodity came from the ateliers of women. In France it might be otherwise-indeed she believed it was so. But in England, the land of hearth and home par excellence, no author pretended to equal the wealth of revelation which authoresses employed, or the masterly combination of breadth, boldness, and finish in execution. (Interruption.) Conscious of these facts. the meeting so thoughtfully called by Mr. Peters wishes to acknowledge his forbearance in confining his complaint to a single point. Forbearance she had said, but not without feeling that delicacy was quite as appropriate a word. For her own part, she could have pardoned its absence-("No doubt")-on the present occasion. She herself was a needlewoman rather than a writer-(Hear, hear!)-and while working a buttonhole or sprigging a bit of muslin she often thought how strange it was that scenes, descriptions, explanations could printed in novels and circulated from the libraries which no critic dared to remark upon with similar frankness in a newspaper or review. Perhaps she need not add that she alluded to the extraordinary additions of physiological exegesis to the resources of romance. She could but think that those resources had been employed too lavishly; and while acknowledging that their venerable chairman could not have touched upon them with corresponding freedom without driving every woman here present from the room, she could but regret that a unique opportunity of doing them that amount of good had been lost. On behalf, then. . . . would gratefully conclude.

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SHAKESPEARE'S BOORS.

There exists an enchanting theory of psychical sympathy, that every great to the effect that the true critic must writer gains sooner or later, in one of be capable of emotional transfusion. kindred passions and tastes, his appre-It is held that analytical power con- ciative critic. It is possible that the sists in divination, that the accurate most erudite Shakespearean expositors understanding of another is the fruit may have been born subsequent to their destined hours, being originally intended by the gods for toastmasters or minstrels at the Mermaid.

I lay no claim to such mysterious endowment. I am a plain man, and here expound a plain man's views. I believe our great Midlander to have been one of simple tastes and habits, yet convivial and witty, one who retained something of his shire's dialect, and revelled in recollections of his youth. At the risk of literary damnation, I confess to liking him best as a delineator of low life. I acknowledge the regal state of Hamlet and Lear, of Othello. Macbeth, and Prospero. Falstaff's tapestried chamber is above my favorite raftered room with the sanded floor and deal benches. The mere kings and queens and maids of honor, with Cassio, Petruchio, Ferdinand, Benedick and Beatrice, Orlando and Rosalind, and the rest of the glorious intriguers and lovers, I go not often amongst them. I prefer the carousals of the Twelfth Night blades, the surly devilries of the Kentish rioters, the tactics of the trio on the enchanted island, the quips and cranks of that unmatchable army of jesters and losels. Shakespeare knew his boor, body and soul, and pictured him accordingly, blunt, eager of immediate realization, intolerably emphatic, sensual as Silenus. The lout that Shakespeare drew I have met years ago, here and there in certain rustic localities, where God's green still lingered on the land, where sometimes a brave lad went coursing of the warrened game by moonlight, ere all the dregs of the grand old peasantry had become shambling dolts and bilious Methodists. I have but to take up my Shakespeare to find myself back in a quaint corner of the Shires, with two or three stolid, shrewd, brave, unlettered originals who will steer the plough and walk the woods no more.

It follows that the modern Shakespearean representation, with its inces-

sant appeal to the spectatorial instinct. its frequent exaltation of mere lordly characters, and consequent compression of the autochthonous and original, does not delight me. I chanced to hear two young people discussing a performance of The Merry Wives of Windsor. "Of course," said one, "I went simply to see Mr. - as Falstaff." "Why, certainly," said the other; "it's the only thing in the play." They seemed to be under the impression that Shakespeare discovered Falstaff, but that the fat knight was quite a common, disrespectable character until Mr. took him in hand and brought him out. "The only thing in the play!" Who represented Caius, Quickly, Evans, the evergreen Shallow, the idiotic Slender? Who personated mine Host of the Garter, a character, line for line, as good as Falstaff himself? Some one knows, no doubt, but no one seems to care. For my part, I stay away, having no wish to view my friend William's sublime etceteras thus kicked into a corner

Are Shakespeare's boors drawn from actual life? I believe they are; I seem to know they are. He may have been indebted to the ancients for much of his history, to Italian and English contemporaries for some of his plots, to tarry Jacks and nimble-tongued travellers for much of his geographical lore. For Lumpkin he had but to consult his memory. Any ordinarily observant and intelligent person acquainted with the rustic Midlands some forty years or so ago will be at home with Cade's merry men, even with the clown that carries the worm to Cleopatra. The bitter old Shireland blood inspires almost every rustic utterance in the plays. Even the jesters are Midland boors in motley; they vent according to lesson the punning sophistries demanded by the Cockney groundlings, but their native spirit breaks through, unmistakable as daylight.

The Shepherd and Clown in The Winter's Tale are undeniable Midlanders. Strike out a few archaic rusticities, and their talk might have come straight from the mouths of old people once known to me. Says the Shepherd, when he first lights on the poor deserted little Perdita: "Good luck, an't be thy will! what have we here? Mercy on's, a barne; a very pretty barne! A boy, or a child, I wonder? A pretty one; a very pretty one; sure some 'scape." Then, as his son, the Clown, enters, he turns to him: "If thou'lt see a thing to talk on when thou art dead and rotten, come hither. . . . Here's a sight for thee; look thee. . . . Look thee here. . . . It was told me I should be rich by the fairies." Elsewhere the son says to the father, when there is like to be trouble over Perdita: "See, see; what a man you are now? . . . Show those things you found about her ... this being done, let the law go whistle." And, again, he says to Autolycus, when that merry rogue is playing on him with a tale of highway robbery, "If you had but looked big, and spit at him, he'd have run."

Here follow a few literal Midlandisms. Bottom: "Say what the play treats on." Adam: "I have lost my teeth in your service." Sly: "Sit by me, and let the world slip; we shall ne'er be younger." Pandarus: "She fetches her breath as short as a new-ta'en sparrow." Kent: "I have years on my back forty-eight." Quickly: "Have a nayword, that you may know one another's mind." Slender: "If I did not think it had been Anne Page, would I might never stir!" Here is old Gobbo with: "Lord worshipped might he be! what a beard hast thou got! thou hast got more hair on thy chin than Dobbin my fill-horse has on his tail." Here is Touchstone, throwing aside his sententiousness, and telling of kisses showered upon Jane Smile's batlet, and the cow's dugs her pretty chopped hands had

milked. Here is Davy, enquiring if anything is to be stopped from William's wages to pay for the sack he lost at Hinckley fair. Here is Enobarbus, shouting, when the trumpets blare, "Ho, says a'! There's my cap!" Here is the Nurse in Romeo and Juliet protesting, just as Granny Tyrrell used, that she is so vexed, every part about her quivers. Here are two fishermen of Pentapolis spouting Midland proverbs. and talking of whales and misers, church, steeple, and bells. Nearly all the above is in good Midland, and only needs the clipping of the final g's, the doubling of certain vowels, and the deep, full-chested enunciation, to bring back certain bugbears and charmers of my childhood. As to characters drawn from contemporaries of the poet's youth, I fall across them everywhere. The Athenian amateurs are the village masquers rehearsing, the Roman soldiers Charnwood yeomen transmogrified, the Italian lackeys the Squire's boisterous serving-men armed with cudgel instead of sword and buckler; Charles the wrestler is the champion of the Cotswolds, Maria of Illyria my Lady's tire-woman, the porter of Inverness Castle "nae Scot at a'," but just drunken Gilbert of Tosspot Hall in Warwickshire.

The boor issues from Shakespeare's hands lumpish of aspect and in greasy jerkin clad, yet prolific of cramp sayings and luminous proverbs, and with an enduring equipment of common sense. Of ideality and veneration the lout is destitute; in his direct outlook comes nothing worthy of worship, nothing worthy of fear except the stocks. the scourge, and hunger, nothing worth much effort except ale, a stout wench, and the means of bare existence. The spirit of blunt mischief is rampant within him; he resembles nothing in Nature except the raven. He has a mighty store of defensive wisdom, which he displays only in extremity.

His jests, uttered apparently in innocence, are stinging and potent as old Stilton stewed in Burton ale. His humor pierces the panoply of the knight, the elegant veneer of the fine gentleman, the cumbrous array of the bookman, fastens unerringly on the concealed weakness, and ruthlessly drags it to light. The pot seems to revel in pitting his most stately worthies against the brutal quipster; and the result is ever disastrous to the lordly one. Orson always gets the last word,-the last word worth uttering. The First Gravedigger gets the better of Hamlet.

The conviviar boors, Stephano, Sly, and Sir Toby, seem above hostile criticism. One beholds, almost smells, the drunken butler. "Come on your ways," says the oaf, tendering his bottle; "open your mouth; this will shake your shaking, I can tell you . . . open your chaps again. . . . Come. Amen! I will pour some in thy other mouth." "Prythee," when Trinculo embraces him, "do not turn me about; my stomach is not constant." When the jester boasts of his swimming powers, Stephano presents the all-deciding bottle: "Here, kiss the book. Though thou canst swim like a duck, thou art made like a goose." Humor stares through his drunkenness like flesh through rags. When he recovers from his fright at the invisible taboring, he says, with a fat chuckle: "This will prove a brave kingdom to me, where I shall have my music for nothing."

The brutal and lascivious Sly is admirably done. His defiance of the absent third-borough is the exact thing; so is his drouthy ejaculation on awaking, "For God's sake, a pot of small ale." His stolid temperament carries him securely through an ordeal intended to produce utter discomposure. He reels once into, "What, would you make me mad?" but recovers himself instantly; and it may be concluded that

the supple lackeys, the mischievous page, and the frolicsome nobles, will have little the better of him in the end. He dozes during the play, and, admonished, utters the plaint that common sense, in these days of bad acting, has but too often suppressed.

Enter the great Sir Toby,-no gentleman of Illyria, but a roaring High-Leicestershire squire of Shakespeare's day. "These clothes are good enough to drink in; and so be these boots too: an they be not, let them hang themselves in their own straps," "Welcome. ass," says he to the Clown, "let's have a song . . . a love-song, a love-song. . . . Shall we rouse the night-owl in a catch that will draw three souls out of one weaver?" Then that tremendous outburst of rage and disgust at Malvolio's interference,-"Out, scab!" His objurgations punctuate the letterscene like thunderbolts. It is intolerable that this magnificent roisterer should be so frequently presented on the modern stage as a mere tipsy lout. Shakespeare's Toby is a bluff rantipole. wide-shouldered, red-faced, thunderous of speech, valiant as a game-cock. "Back you shall not," says he. . . . "Strip your sword stark naked." "What, what?" to the incensed Sebastian. "Nay, then I must have an ounce or two of this malapert blood from you," When wounded he dismisses the matter with: "That's all one; he has hurt me, and there's the end on 't." A sturdy gamester; no wonder Maria adores him.

The fat tapster in Measure for Measure is a different kind of losel, an incorrigible trafficker in obscenity, a rogue mercantile, adaptable, utterly corrupt. On one point only is he fortitudinous; he refuses to be "whipt out of his trade." The rigid social regulations of the city impress him not; he holds fast to his faith in the supremacy of the baser instincts. He is the most humorous of boors. Questioned as to

his vocation, he answers, "Truly, sir, I am a poor fellow that would live." The majesty of the law, as embodied in the peremptory Escalus, has no terrors for him. Coarse humor, under the grip of judicial examination, oozes from him at every pore. "Is it a lawful trade?" asks the magistrate. "If the law would allow it, sir," the rogue replies. . . . "If this law hold in Vienna ten year, I'll rent the fairest house in it after three-pence a bay; if you live to see this come to pass, say Pompey told you so." Advised to reform and thus escape whipping, he answers, "I thank your worship for your good counsel," and then adds aside, "but I shall follow it as the flesh and fortune shall better determine." The dialogue between him and Barnardine is probably the best sample extant of unconscious selfcharacterization. Pompey: "You must be so good, sir, to rise and be put to death." Barnardine: "Away, you rogue, away! I am sleepy." Pompey: "Pray, Master Barnardine, awake till you are executed, and sleep afterwards." Heartless, unctuous humor on the one side, brute hardihood on the other. No more can be made of either quality, even if ten volumes be filled. And I think it may reasonably be assumed that the original of this fat rogue had stood in the dock at Warwick, and with ready tongue saved his guilty hide from scourging.

Shakespeare makes his urban mobs despicable. His only rustic mob is formidable in the extreme, and is not even deluded till the end. The churls who follow Cade applaud his lies en masse, yet their asides show that they see through him. They merely extend grinning acquiescence to his impudent assertions; in reality they care as little about the claims of Mortimer as about those of Mahomet, but they are sick of taxes, hunger, and the thievery of lawyers. They are at bottom not disinclined to measure their prowess

against that of the knights and menat-arms, and entranced, despite their shrewdness, by the specious promise that, when Cade is king, it shall be felony to drink small beer.

The Shakespearean boors are nearly all brave men; even little Slender has taken Sackerson by the chain, and fought with a warrener. They are brave with the peculiar courage of the boor, a courage that explodes into fight only when there is no direct method of escape or compromise. Then they are ready with fist, foot, and cudgel, and, in the last extremity, with cold The Kentish rising forms the most heroic episode of its kind in print. One cannot suspect Bevis, Holland, Smith, the tanner of Wingham, and Dick the butcher, of the faintest speck of white in plumage or liver. One perceives that they will not fight till sorely put to it, and then it will be hard to get them to leave off. The redoubtable Cade is as fully panoplied in rugged valor as Falconbridge himself. Daring rings in every word he utters; he is the very nonparell of unscrupulous desperadoes.

The whole scene of the rebellion teems with the brutal jocosity of the ancient English rustic, blooded, and maddened by drink, combat, and vengeance. It is principally in that terse and vivid prose that Shakespeare was such a master of. It is the old idea of a thunderbolt. A distant muttering, a darkening of the sky, debate of opposing winds, and pandemonium is let loose. Through the storm break peals of brutal, titanic laughter; the lightnings dance, striking good and bad indiscriminately; there is a pause,afresh the winds howl and contend. the storm dies away in confused rumblings, sun and blue sky look upon the desolation below, and in an obscure nook lies the meteoric fragment, cooling fast into a mere grisly memento. No living writer could in three times

the space illustrate as much as Shakespeare has done in these five short scenes; yet there is not the slightest awkwardness or appearance of compression.

The grim pleasantries of the rebel chieftain chill the reader's blood. The wretched Say pleads that his cheeks are pale with watching for the public good. "Give him a box o' the ear," says Cade, "and that will make 'em red again. . . . Ye shall have a hempen candle, then, and the help of hatchet. . . . Nay, he nods at us, as who should say, 'I'll be even with you': I'll see if his head will stand steadier on a pole." When the bleeding heads of Say and Cromer are brought before him, he exclaims: "Let them kiss one another. . . . Now part them again, lest they consult about the giving up of some more towns in France."

The scene of the combat in Iden's garden may have been built up from the capture of some Warwickshire deerstealer, a marauder whose exploits would be strung into a rude ballad, and chanted in the kitchens of Stratford inns. "Here's the lord of the soil come to seize me for a stray," is a literal Midlandism. Says the desperado with his dying breath: "Famine and no other hath slain me; let ten thousand devils come against me, and give me but the ten meals I have lost, and I'd defy them all. Wither, garden . . . the unconquered soul of Cade is fled." With just such an adjuration as this would such a ballad end.

The soldiers' talk before Agincourt is marvellously illustrative of the old English spirit. They grumble bitterly, yet have no thought of surrender; they openly doubt the King's courage, yet are prepared to wade in blood for him. Says Williams, after striking Fluellen: "My liege, this was my glove; here is the fellow of it; and he that I gave it to in change promised to wear it in his

cap: I promised to strike him if he did: I met this man with my glove in his cap, and I have been as good as my word." This speech is of the Shires in idiom and construction, and is a fine expression of the old yeomanly way of "seeing a quarrel through." It is full of simple dignity, self-reliance, and valor. It sums up the matter in the fewest words possible, and nearly all of them are monosyllabic. Compare it with the bombastic avowal made by Troilus:

Were it a casque composed by Vulcan's skill,

My sword should bite it: not the dreadful spout

Which shipmen do the hurricane call, Constringed in mass by the almighty sun,

Shall dizzy with more clamor Neptune's ear

In his descent than shall my prompted sword

Falling on Diomed.

In which is Shakespeare at his best and safest, in the reproduction of the curt disputes of the village green, or imitation, sincere or otherwise, of the antique declaimers? In Williams's speech, methinks, something rings that may lock the teeth and bring blue lightning to the eye, as when, but a few hours before, he drew his bow-string to the ear, took one stride forward, and sent the gray-goose shaft singing through the air. In the other are mighty fine rhetoric and a deal of wind. One is in doubt whether Diomed will be hurt much, after all. One perceives that if gallant King Hal does not step in between the blunt archer and the choleric Welshman, there may ring another box o' the ear, another, and another, swords may be stripped, toes planted-a few swift passes, and at least one of the disputants may lie gasping out his life on the green turf. Such was the mettle of our rustic forefathers, the "good yeomen, whose limbs care we have some such grim backing the pure gold of valor, and paying but behind our modern rhodomontade, or with yellow paper.

Macmillan's Magazine.

were made in England." Let us take Posterity may accuse us of promising

George Bartram.

PATRIOTISM AND CHRISTIANITY.

With what for want of a better name we may call the primary instincts of Human Nature, the legislator and social reformer will do well to meddle as little as possible. With some of them, indeed-the Predatory instinct for example-meddle he must; a Criminal Code is still a melancholy necessity; but as a general rule the legislator who is wise leaves Human Nature alone. The Christian, within the realm of his own breast, can exercise no such pru-He is bound to dent forbearance. quarrel, not indeed with all his primary instincts, but with a great many of them, ab initio. This is why it is even proverbially a hard thing to be a Christian, who cannot with safety in the hour of emergency fall back upon himself, or, as the phrase runs, "let himself go." If he does-and he frequently does-the result is invariably disastrous.

We have but to look out, as Dr. Newman in so many a stirring passage has bidden us do, upon the great, restless world, upon its buyings and sellings, its Armenian massacres, its Congo atrocities, its Port Arthur sieges, its animosities and ambitions, its empty amusements, its misery and ennul, its newspapers, to see for ourselves what a perpetual misnomer is the expression "the Christian world." Throughout the wide world the primary instincts, self-love, national pride, racial habits, jealousy, greed, the love of display, manly courage, energy, friendship, good fellowship, the good and the bad, the God-like and the devilish, all inextricably entangled, bear a sway which is very partially controlled by prudential or humanitarian considerations. The world never really alters its mind, though it does, as time rolls on, change its point of view and reform a few of its habits.

In this process, not of change but of modification, the testimony Christianity and the example of Christians has, in the Western world, played a great part. How great nobody can say. Such influences are too subtle for analysis. It may be that just as Free Traders are perhaps too apt to attribute all increase of material prosperity to the open market and to forget railways and electricity, so the zealous Christian sometimes places to the credit of his faith the whole of the humanitarian movement

It is no fault of Christianity that the world has assimilated so little of Christian ethics. There can never be a concordat between the Nazarene and the world. Unconditional surrender is the first step in the Christian life. All attempts to whittle away this initial difficulty can only tend to dechristianize Christianity without purifying the world. The only vital objection to Church Establishments is that whilst they do the world small good, they do the Church great harm, for just as Napoleon, that greatest Erastian of them all, forced the Pope to come from Rome to Paris to celebrate the Emperor's marriage with an Austrian princess, he having a wife living at the time, so the principle of Church Establishment (which has just cost the Free Churchmen of Scotland a matter of five millions of money) has often compelled the Church to deny her Master, and to lend all her ecclesiastical trappings to decorate human ambitions and conceal crime.

I now approach with timidity and circumlocutory caution Patriotism, or the love of one's native land. This we may safely assume to be a primary instinct among men of our breed. Where is it bred? In the cool language of Philosophy, patriotism is a bias of the mind; a predisposition to love your own land better than any other parts of the round globe. There can be no doubt where Patriotism is bred. It begins at home. It is the creature of early association, of the thing's you first saw-the laburnum tree outside the nursery window, the lane at your father's gate, the footpath across the fields. From these things and from the emotions they excite there is no escape. A very simple verse of an Irish poet, William Allingham, sums it all up with true feeling:-

> Four ducks on a pond, A grass bank beyond— A blue sky of Spring, White clouds on the wing. How little a thing To remember for years, To remember with tears!

Browning, in his earliest poem, has said the same thing more grandiloquently:—

As life wanes, all its cares and strife and toil

Seem strangely valueless, while the old trees

. Which grew by our youth's home, the waving mass

Of climbing plants, heavy with bloom and dew,

The morning swallows, with their songs like words,

All these seem clear, and only worth our thought.

English poetry, probably all poetry, is full of such things, and at times their pathos is overpowering; and particularly is this so when they occur in songs of exile:— .

Ah! that hamlet in Saxon Kent,
Shall I find it when I come home,
With toll and travelling well-nigh
spent,
Tired with life in tungle and tent

Tired with life in jungle and tent, Eastward never again to roam?

Pleasantest corner the world can show, In a vale which slopes to the English sea,

Where strawberries wild in the woodland grow,

And the cherry-tree branches are bending low—

No such fruit in the South countree.1

Water can rise no higher than its source. Home is the birthplace of Patriotism. Hence come an Englishman's pride in his inviolate shores, his thought of a foreign invasion as an outrage, unbearable, almost unthinkable, provocative of speechless passion. And yet Englishmen have invaded other men's shores with smiling faces as if half expecting a friendly welcome.

As we grow up, the horizon enlarges and our ideas grow complex. The parish becomes the county, and the county swells into the country. The Man of Kent, the Devonian, the West Countryman, the East Anglian, the Northumbrian, whilst retaining the primitive passion for the homestead, learns to call England his home. By a painful effort of the will, sweetened by a hundred bad jokes, he includes Scotland. On Wales he smiles benignly. Ireland, alas! is still out of the picture.

In this enlarged Patriotism, which, of course, includes places you have never seen, homes you have never visited, pride comes in, pride in the achievements of one's country in war, in government, in literature, in arts and industry. History allows England a great place, and with natural egotism we make the very most of it. We

^{1 &}quot;Verses written in India," by Sir Alfred C. Lyall.

blow our own trumpets vigorously enough. But English national pride is no greater than French pride, or Spanish pride, or Italian or German Each nation may have its pride. own way of manifesting its pride, a way which the others often consider either ludicrous or offensive, but, speaking generally, no one who is not already an Englishman wants to be one, but is more than content to stick to his domicile of origin. This shows the universality of the passion. One distinction is, however, noticeable. some nations the great achievements on which the national pride is founded lie behind them, as in Spain and Greece, two of the proudest names of all; in others we may find united a proud past and a proud present. Great Britain and France are examples; whilst in the case of some other of the nations their pride consists in "forward reaching thoughts" even more than in their present grandeur-the United States of America, and the great Dominion of Canada may serve as illustrations.

Love and pride make up the Patriotism of great nations; love of the soil, the veritable earth, the good brown, or red, or white earth where one was born, and pride in the achievements of the sons of the soil, and of those who may be happily united with them in political union.

But what of the countries which, owing to their unlucky geographical positions or other causes, have no proud history of successful valor in the field, or of commercial prosperity; whose story is a tale of disaster, discomfiture, despair; whose prevailing note is melancholy, and whose constant doom has been disappointment? I will not name these veiled and weeping figures; but Mr. Arnold, a very intrepid writer, in a pamphlet printed in 1859 on Italian unity did not hesitate to say that though Italy and Greece were justly entitled to national unity by reason of

their history, Ireland and Poland and Hungary were not. A hard saying. The patriotism of Irishmen, Poles and Hungarians is indisputable and indestructible; but it is not necessary that every nationality should stand alone, or even that it should wish to do so. Political union does not involve national absorption. The Celts in Brittany and the Germans in Alsace lost nothing during their days of happy union in France. The Scot and the Englishman will never again, it is reasonable to believe, fight on opposite sides. No flag excites stronger emotions at the present time than the Stars and Stripes, yet how many races share the enthusiasm!

Political unions may possess great binding strength. In what does the bond consist? Neither blood nor even racial affinity is necessary. It is a common history in which all may take pride and none need feel shame, and a community of interest. When there is such a common history, and a community of interest, local patriotism and plenty of it need not be injurious, nor is there any reason why a small country or state should not willingly share in the pride of a great compound community.

But, true as this may be, a political union rests on a less firm foundation than the unity based on the love of home. The hero of the great American conflict, General Lee, of the Virginian Army, hated slavery as much as any Northerner could do, and gladly would have seen it disappear; but when the agonizing hour struck, and he had to make up his mind between what he believed to be the State rights of "Old Virginia" and the Federation, he felt he had no choice but to draw his sword and throw away the scabbard on behalf of his home. He was a Virginian first and a Federalist afterwards. The whole of Tory England vehemently shouted its approval,

We shall do well to remember this crucial example to-day when lovalty to our vast and far-scattered Empire is being preached with so much feverish energy. The British Empire is a great fact and a still greater idea; to help to bind it together in ties of pride. honor, justice, mercy and the love of liberty is a noble enterprise; but we must not imagine, for it would be a vain imagining, that we can transfer to an Empire it takes both hemispheres to contain, what I will call the pond and duck feeling of Mr. Allingham's verses. You cannot do it. The Canadian born in Canada will be, must be, a Canadian first and an Imperialist afterwards. If he were not, he would hardly be worth having. So, too, with the Australian and the New Zealander. And our plight is the same in the Old Home.

Patriotism, which, if not born with us, is created and fostered by our very earliest and therefore deepest associations, and expands as we become "children of a larger growth" into political pride, is a main element of our social existence. A man without a country to love and a State to be proud of suffers a cruel deprivation. He is a motherless being. Gibbon, who seems never to have experienced a mother's love, writes in his autobiography: "I am tempted to enter my protest against the trite and lavish praise of the happiness of our boyish years, which is echoed with so much affectation in the world. That happiness I have never known." On this passage Sainte Beuve observes: "J'ai déià remarqué cela pour Volney; ceux à qui manque cette solicitude d'une mère, ce premier duvet et cette fleur d'une affection tendre, ce charme confus et pénétrant des impressions naissantes, sont plus aisément que d'autres dénués du sentiment de la religion.2 The same cast of thought applies to those unfortunates who are deprived of the pride of country.

None the less Patriotism is a separative feeling, tending to cut its votaries off from the greater community of Nations, and one of the best results of a truly liberal education is to get men out of a too narrow groove of thought and feeling. Two of the most powerful influences in this direction are Travel and Literature. Your first visit to Paris, a holiday ramble in Holland and Belgium, the Swiss guide who pulled you up the Wetterhorn, the excitement of Venice, the joys of Florence, the rapture of finding yourself in Rome, the novels of Dumas and Turgenieff, Don Quixote, Molière and the Théâtre Francais-all these, and a hundred other things, some seen, some heard, some read, cause scales to fall from the eyes, and you realize how much it takes to make even Europe, and how poor a view of the world that man has who finds no place in his heart for the progress and welfare of other nations than his own.

Cosmopolitan is an odd word. Sometimes it conveys a compliment, at other times it hurls an insult. It may mean a noble humanitarianism, or a shabby indifference to the duties that lie nearest home. Mr. Mill accounted it one of the glories of the Greeks that they "led the way to the cosmopolitism of modern times," but other writers have thought they discovered the secret of Rome's decay in a vain striving after this same cosmopolitism.

At this particular epoch in England one has to walk warily. You must not be a "little Englander," but neither must you be a cosmopolitan. Your imagination must not stay at home, for:—

Home-keeping youth have ever homely wits,

but neither must it travel outside the British Empire. Like Trade was once said to do, Imagination must follow the flag. For my own part, wide as the British Empire is, I decline to be bound by it, for it does not yet contain Rome, Athens or Jerusalem. No Englishman is in the least likely to forget in what country he was born, or that

Chatham's language is his mothertongue,

or the extent of the British Empire, but neither should he forget that he is a citizen of the world and ought to be eagerly interested in all that makes for good in every quarter of the globe.

We have suddenly become very nervous about our possessions, including our Patriotism, one of the noblest of them all. The present Colonial Secretary thinks it should be taught in our Elementary Schools as a separate subject. But how would he set about it? It would be disagreeable to cane a boy or even to keep him in because he did not love his country enough. Keate is reported to have said, "Boys, if you are not pure in heart I will flog you," but in the first place the story is probably not true, and if it is, the experiment was not successful. would be easy to teach children to hate and despise other countries, to gloat over their misfortunes, to ridicule their habits, real or supposed, to envy their prosperity and to forswear some of their manufactures, but to teach a lofty, ennobling patriotism is a task which could not be discharged in any particular half-hour three times a week. Patriotism of the true kind is an allpervading temper, a generous, chivalric spirit after the old knightly fashion, a vague yet penetrating impression produced by

> The silence and the calm Of mute insensate things,

by the impulses of "deeper birth" which come to us "in solitude," and by the pride that springs from the knowledge that your countrymen have played

and may still play a great part in the education of the world.

The relation of Christianity to Patriotism ought not to be overlooked, particularly if both the one and the other are to be taught side by side in our State-provided Schools.

Christianity is not a tribal Religion. It is based on the Fatherhood of God and not on the British Empire, which quite truthfully asserts that it in no way concerns itself with the religions comprised within its rule. The Lion and the Unicorn are not particularly religious beasts.

The sanctions of Religion transcend the boundaries of States and are independent of them. "My country, right or wrong," is not a Christian maxim. If Patriotism involves, as happily it need not, the enthronement of country or empire as the conscience of man, the touchstone of right and wrong, the lode-star of politics, Patriotism would un-Christian, and an Empire founded on any such notion would not be undeserving of the once dread name of Anti-Christ. A Religion which could submit to be the handmaid of Empire, a "kept" priest to bless or ban as the passions or self-interests of its employer dictated, would be "a mockery, a delusion and a snare."

With a Patriotism founded on love neither Christianity nor any noble system of Ethics can quarrel; but how much of what so commonly passes for patriotism is nothing but hatred! When during the American War Captain Wilkes of the United States Navy, in exercise of a supposed Right of Search. stopped the Trent in mid-ocean and carried off four Southern gentlemen on their way to England to obtain help for their cause, England, almost to a man, cried aloud for the blood of those very Americans to whom now we cannot be too civil. We stood on the very threshold of what would have been the most popular war of modern times-popular

I mean in its inception. Was the outburst of feeling over the *Trent* affair true Patriotism, or was it merely an exhibition of rancorous hate, exaggerated self-love and blustering passion? It is hard to say, for the "patriotism" of to-day is often the "folly" of to-morrow.

To conclude these desultory remarks. A man's love of his native land is the surest basis of national life and character. A well-tempered, widely-informed pride in the great achievements of the men and women of your native land in all the fields of honorable activity is of the essence of patriotism. A conviction that the country or political union to which you belong is destined to take a great part in the work of humanizing the world, so that before the end comes cruelty may have ceased even in its dark places, is a glorious faith. To take this part Courage and Strength are both necessary. A healthy breed of men enured to discipline, willing to work, ready to die, proud of the flag, jealous of its reputation in all parts of the earth,-that Britain may produce in increasing numbers such a breed is the pious supplication of true British patriots, and it is a prayer to which the whole world might say Amen!

A true patriot does not hate the for-The Contemporary Review. eigner, even though he be as nearly related to him as, for example, are the Germans to ourselves. He looks forward to closer intercourse and a complete fraternization. This is not a path along which there is any danger of our travelling too rapidly.

If we are to talk of ideals and dream dreams as we are now often invited to do, let us "hitch our wagon" to the right star. The Brotherhood of Man is a long way off; it may never be reached; but as an ideal it is better worth having than that of half-a-dozen sullen Empires, trading only within their boundaries, shut up behind high tariff walls over which they peer suspiciously, scanning one another's exports and imports with jealous eyes. and making from time to time fawning alliances with one rival, whilst cultivating enmity with another, maintaining millions of men under arms and spending billions of pounds in armaments, and all the time waiting, waiting, waiting for an affrighted sun to rise upon the day of Armageddon.

If this were to be the destiny of the human race, far better would it be if the planet could be spun off its axis and allowed to disappear into the "illimitable inane." But nobler things lie before us, and a brighter dawn.

Augustine Birrell.

WIND AND WAVE.

Full is the air of the voice of the sea, Full of the voice of the clamorous sea, Voice of the hungry insatiate sea!

Like famished wolves on the scent of the prey, White-crested eager waves rush to the shore, Leap in wild tumult on rock and on reef; Striking with thunder the face of the cliff, Uprearing a moment above the wild sea—Break and dissolve in a welter of foam.

Loud shouts the north wind, the white horses hear, While flies the foam from their far-streaming manes. Springing, foam-footed, through fields of the sea, Urged by the rush of the oncoming wave.

Wind! blow thy trumpet and make thyself heard, Check the white horses that spring to their doom, Shout to them, shout, that they leap not on shore, Leave not their pastures where green waters roll!

Great and resistless their might on the sea. Terror and wonder alike to behold. Powerless on shore they wax feeble and halt-Break and dissolve in a welter of foam.

Longman's Magazine.

L. Baldwin.

AGNOSTICISM AND NATIONAL DECAY.

It is not among philosophers that we shall come across a view, widely held and often expressed, which denies the or ideals. Liberty of conscience, freedom of thought and speech, are indeed applauded by many just because, as they say, opinions do not matter any more than the color of a man's beard or the cut of his coat. Let him be Christian, agnostic, atheist, we are told; it is all one on the Stock Exchange. in business, enterprise, amusement. If he takes a hand in modern life he must play the game. And with that game his private fancies have nothing to do. In like manner the nation-any nation-is committed to a struggle for existence in which the fittest will survive. On this argument, agnosticism belongs to the world of pure speculation, like the higher mathematics. It can neither make nor mar the fortunes of an empire. And the discussion of it may be left to clergymen or professors who feel drawn towards abstruse but unprofitable studies.

This frankly indifferent attitude must have received a shock when Professor Huxley, the father of agnosticism, delivered his Romanes Lecture at Ox-

ford in 1893. For he laid down in unmistakable terms that without ideals. deliberately chosen, there could be no influence on social progress of creeds improvement in society. Allowing that the "cosmic process" governed Nature, he went on to declare that "social progress means a checking of the cosmic process at every step, and the substitution for it of another, which may be called the ethical process; the end of which is not the survival of those who may happen to be the fittest, in respect of the whole of the conditions which obtain, but of those who are ethically the best."1

> Social advance was, therefore, according to Huxley, bound up with advance in right conduct, and was merely another name for it when viewed on the largest horizon. Ethics, civilization, progress, were but different facets of the same jewel. And social, or national decay, being the contrary to all this, must mean the production of the ethically unfit, who are really, whatever their pretensions, uncivilized or degenerate. So much appears to be evident from the text which I have quoted above. Moreover, that we might not be in the dark as touching

1 Huxley, "Evolution and Ethics," p. 81.

his drift and purpose, the eloquent Professor went on to clear his words by definition. "As I have already urged," he told his Oxford auditors,

the practice of that which is ethically best-what we call goodness or virtueinvolves a course of conduct which, in all respects, is opposed to that which leads to success in the cosmic struggle for existence. In place of ruthless selfassertion it demands self-restraint; in place of thrusting aside, or treading down, all competitors, it requires that the individual shall not merely respect, but shall help his fellows; its influence is directed, not so much to the survival of the fittest, as to the fitting of as many as possible to survive. It repudiates the gladiatorial theory of existence. 2

This declaration, from the lips of our most celebrated agnostic, who had invented the title under which his noreligion was henceforth to walk the world, called out cries of admiration on one side, of dissent and dismay on the other. It was admired by Christians, who did not in the least look for it in so hostile a quarter. But many of the Professor's friends and former allies cast it out as treason to science, a breach of logic, and a lapse into orthodoxy. The growing school of which Frederick Nietzsche had become the prophet, were vehement in reprobating so bold an attempt to exalt ethics above what they termed "Nature"; but they asked for Huxley's reasons in vain. He could not, or would not, allow that he was only half an agnostic, and had found himself unable to frame a theory of civilization from which the old Christian ideals might be eliminated. Nevertheless, if men ceased to be orthodox in their beliefs, it was not likely that they would take the New Testament for the standard of their conduct, whether as individuals or as nations. The agnostic was bound to discover and to establish

² Huxley, "Evolution and Ethics," p. 82

a code of morals that should make for progress, or he was the herald and would prove to be in no small measure the cause of social decay. Did, then, religious opinions not matter to the prosperity of a people? It would seem, on the contrary, that nothing mattered so much.

The great issue, it has been well observed, for England as for every other modern State, is decline or ascent. No society in our Western world can rest on a level, or print a stereotype and live by it. There are certainly laws and conditions of progress which it is out of our power to fulfil unless we think the truth about them. If Professor Huxley was not astray in his definition of social virtue, and if a nation rises or falls according as it multiplies the "ethically best," or hinders their multiplication, we are justified in asking what is our present ideal of life, as lived in the English-speaking world, and what are the facts which underlie our practice. The morals commended by our Romanes lecturer with an assurance so unclouded are, it will never be denied, Christian. They were not framed, or preached, or realized on a large historical plan by agnostics, but, as might have been anticipated, by the followers of Him who first made them familiar in a Divine example. The consistent agnostic repudiates them, precisely because they run counter to the cosmic process. How can man, he argues, dream of forcing his own moral standard upon nature? "Why should we not look at him," inquires the translator Nietzsche, "as a being above all physiological, and measure first of all the value of his art, civilization, and religion, by their effect upon his species, by the standard of physiology?" " The ethical process ought to obey the cosmic process, being only a means to that end. Evolution, not directed by

^{3 &}quot;Nietzsche's Works," vol. xi., pref. p. xvi.

any moral laws, absolutely unfettered by ideals, is the only God. And all future civilization is bound to be secular.

As for religion, Christian or any other, when its dogmas are no longer believed its ethics pass away, by sheer logical necessity, in obedience to that instinct which is ever rounding our existence into an ordered whole. Thus we are approaching to a "transvaluation of values" like that which took place when the old Pagan world exchanged the thyrsus for the crucifix. It is now being wrought out in the midst of us, partly as a reaction, but still more as a revolt, from the "ascetic" maxims of Christ. Those maxims were recognized and had public acknowledgment among Puritans as among Catholics; in sad-colored New England not less than in sun-burnt Huxley was, therefore, upon __ this showing, in his Oxford lecture a benighted Christian, a Saul among the prophets, who ought to have known better than to strip himself before the University and all Europe of the mantle of science, that he might lie down with partisans of self-sacrifice and check the cosmic Juggernaut's advance.

I hope the situation is now clear. By an agnostic I mean every one who has, consciously or unconsciously, decided that nothing can be known of the origin, end, or purpose of things; and who therefore acts as if human hopes and fears are alike to be interred with his bones. There is one life, the present; one duty, to make the most of it; one irretrievable failure, to have passed by, or thrown away, opportunities of happiness during our brief season. From those opportunities, remark, all sources are cut off which imply or demand belief in the world to come, in a God who is not the cosmic formula, in transcendental rewards and punishments, in revelation, prayer, and, to sum up, in religion. For all

these things are falsehoods, or at least fictions, and science is founded on truth. Nay, it will be patent on a little consideration, that once the agnostic knows his own mind, he cannot, if he would, discover happiness in the old mythology. Transition takes time; piecemeal and illogical characters may vex the symmetry of a new social order; but these will be like the Pagani who hid themselves in out-of-the-way nooks when Christianity triumphed, survivals that do not count. The coming experiment, of which tokens are every day more obvious, will endeavor to carry on our social system, hitherto in various degrees governed by the ethical standard which Huxley described as the best, not in that manner at all, but as a physiological problem to be resolved by purely scientific methods.

Of this threatened revolution the first symptoms are already upon us. While philosophy argues, society acts. society has, to an amazing extent, translated the agnostic views into a code of conduct. Religion, for a very large number, and those in stations of influence, is no longer on its trial; it has ceased to exist. Doubt, positive and paralyzing, has taken hold of so many that a protest in the shape of revivals, accompanied by intense excitement, is spreading among the less educated, who feel that the clergy themselves have too often opened the gates which they were sworn to defend and are letting in the enemy. I do not write these words by way of challenge, still less by way of satire, but as indicating phenomena which every observant man will judge for himself. That the future of England. as of other countries at a like degree of culture, depends on its attitude towards the secularist or agnostic view of life and action, I am convince.l. And that we possess, even at this early stage of the movement, facts on which to form an estimate of its course byand-by, shall be now shown, briefly in the space allotted, yet, as I hope, not without sufficient grounds.

We are taking for granted, as Huxlev did in his Romanes Lecture, that all human progress worthy of the name is, at last, ethical. And, furthermore, that the heart of ethics is self-sacrifice. We will not stay to answer difficulties well-worn in these high questions, concerning the relation of the individual to society. Be it enough to assent when our Professor demands "that each man who enters into the enjoyment of the advantages of a polity shall be mindful of his debt to those who have laboriously constructed it; and shall take heed that no act of his weakens the fabric in which he has been permitted to live." 4 Such is the duty of the citizen, the father of a family, the landlord, the lawgiver, the administrator, and of every one else who is protected by the social order, especially when from that order he wins the privileges that we term vested rights, rank, property in public resources, and an hereditary income. With regard to women, it is equally clear that marriage and maternity in a civilized condition have their duties, as well as their claims; that anarchy is not an ideal of motherhood; and that the home is the foundation at all times of what is ethically best.

Now it appears to not a few lovers of progress, in the sense laid down, that modern economics have joined hands with modern unbelief in an attempt, the outcome of which, if left to itself, would be catastrophe. We hold that civilization, here in England, oversea in the United States, in Australia, and, coming back to the Old World, above all in France, is exposed to a great danger, and may, during the twentieth century, enter on a period of decline. We believe that period has

begun in France, which seems to have lost the power of selecting fit governors, and is utterly given over to Malthusian practices. But we observe the like phenomena, due to not unlike causes, though not yet on so large a scale, in Great Britain and many of its dependencies; while in the United States a dissolution of marriage seems to be spreading far and wide. The Puritan families, on which the greatness of America was founded, are dying out of the land they refuse to occupy with their descendants. President Roosevelt, who is alarmed at the reign of trusts, now calls for legislation to stem the tide of divorce. These are grave symptoms, not confined to any one race, constitution, or social degree, in the hundred and seventy millions whom we may describe as the vanguard of progress. I will not extend the survey across the Rhine, although in Germany too, and elsewhere on that side, the prospect is assuredly disquieting. But when we perceive whole nations liable to one disease, which every year returns only to multiply its ravages, we are led to imagine that it cannot have in these various countries different causes; but that a certain kind of atmosphere and climate favors the deadly infection. What, we ask ourselves, has happened to bring about this plague and to give it strength? In social changes it will be seen, if we look closely into them, that a revolution in thought is always the beginning, wherever some great cosmic influence-some glacial period or some abnormal increase of temperature-cannot be invoked. A glacial period, truly, is setting in; but of the mind, not of the globe. And its name is Ag-The intellectual sun is nosticism. darkened; human life is moving away from the centre of light towards the depths of space. Men and women shape their conduct more and more as if there were no God.

4 Huxley, loc. cit., p. 82.

When we have sorted out this cause from the mingled yarn of daily events, we can follow it in action and explain a world of things that would otherwise be most perplexing. Note, however, that it is not always, and need not be. as obvious to the victim as it becomes to the looker-on. From their very nature general laws escape observation. People go by custom: when the custom changes it does so gradually; and imitation may be widespread ere philosophers themselves have accounted for it. Thus it is now some five-andtwenty years since the birth-rate in England began to fall; it was lowest in 1904; but only when the Socialist reformer called attention to it were the public in any degree troubled. Even now, they have not grasped its real significance. Large families are ceasing to be desirable. Why? For economic reasons; they cannot be supported according to the standard of comfort which prevails in any class above the lowest. Yet this is not an ultimate reason; it is rather the starting-point of a new inquiry. comes it, we must demand, that the lessening birth-rate affects even those classes where wealth is secure and leisure ample? Poverty, or the dread of it, will account for a decline in marriage; but it is not mere poverty that will explain why fewer children, comparatively to the population, were born in England last year than at any time since State registers have been kept. What has befallen the idea of marriage? That is the question. Poverty and luxury, pleasure-seeking instead of duty, and disbelief in the Bible which has laid under anathema the violation of natural laws-these must all be taken together. The spirit of anarchic individualism that cries out "No God, no Master!" is needed to tell us why Englishmen and their wives, once dedicated to a blameless and lasting union, have fallen into the pit which Malthus or his followers digged for them.

It is idle, as well as provoking, to say that such things ought not to be discussed in public. They will require, more and more, to be discussed, if we want to know the true condition of England. Nor yet of England alone. For their significance lies in the fact that wherever unbelief has taken hold, or doubt saps the ancient creeds, there Malthus reigns instead of Christ. When the fierce assault was beginning, with Bentham, James Mill, and the Westminster Review to give it a programme, which in seventy or eighty years has wrought the defeat we are witnessing of Christian virtue, one of its chief axioms was borrowed from the Essay on Population. The utilitarian spent his days in proving that "there are too many children." He has been echoed by the downright atheist in Nietzsche's Zarathustra, who calls the State, with its Poor Laws and its Factory Laws, "the refuge of the superfluous." In other words, it was Christian pity which had stepped in, and which would not allow the lords of capital to abolish all difference between their animated and their mechanical instruments for producing the value which they took to themselves.

An exclamation of despair on this humane account may be heard in those old, and happily now discredited, manuals of the "Let alone" economics. "Unless the working class," observes McCulloch or another, "resolve to limit their offspring, they must continue to feel the pinch of poverty." Now, however, the rich and richest class are limiting their offspring. The proletarian was advised, nay entreated, to take counsel of Malthus. But the millionaire, in act or in hope, is doing the like, and for a reason which, in last analysis, turns out to be equally condemned by ethics. Both are "hurting the fabric of the State in which they live." But whereas the proletarian may plead his low wages, uncertain employment, narrow lodging, and how impossible is home when the mother works all day in a factory, or is sweated in her miserable den, what is the fashionable woman's apology? We can hardly give it a decent English name. In French it has been expressed by Maupassant as "l'inutile beauté." The wife is resolute to take her pleasure as long as may be; she sacrifices her home to the world which drives in the Bois de Boulogne, meets at the Comédie Française, and peoples Cosmopolis. "Le monde où l'on s'amuse et s'ennuie." Another might describe it as the world where nobody works for his living, and where every one eats the fruit of many men's toil and many women's vice or suffering.

Doubtless certain of these criminals appear in the catalogue as believers; they attend smart churches; they look down on the Socialist of Hyde Park or Belleville. But we are now in the Palace of Truth; we cannot take a badge for a wedding-garment. We should ever bear in mind that a great company, well-nigh controlling the European press, and including most famous names, has during more than fifty years declared the alliance between knowledge and unbelief to be at once necessary and inevitable. To speak only of England-consider again Bentham, the two Mills, Darwin, Huxley, Bain, and Spencer; are not these, to an average man, the lights of the nineteenth century? Well, with whatever differences, they all agree to reject Christian dogma; and, if we leave out Stuart Mill, they cast from them every hope in immortality and will not hear of a personal God.

With such a system, the anarchy of isolated pleasure-seekers becomes perfectly intelligible. Neither will it seem easy for the Socialist who holds a nobler creed, but has flung away its

'Christian premisses, to prove that the egoist is in the wrong. "My pleasure for me" is a maxim which sounds more appetizing, and therefore more reasonable than "Your pleasure bought by my self-sacrifice." Professor Huxley assures us that "Laws and moral precepts are directed to curbing the cosmic process and reminding the individual of his duty to the community, to the protection and influence of which he owes, if not existence itself, at least the life of something better than a brutal savage." No doubt he does: but on what compulsion are you to make him recognize a duty which brings no personal pleasure, when such pleasure is all the motive he allows?

Let me not be misunderstood. I believe in virtue and self-sacrifice, or I should be no Christian. But the point is whether, to the common man, you can justify virtue and self-sacrifice when you have denied his God, resolved his heaven into the boundless ether, and taught him to believe in mere physiology. I say, with past history open before me, that you will do no such thing. But the argument is all the stronger when we look at present and undeniable facts. Fifty years of discussion, ending in widespread doubt, have created not only new conditions under which the social forces must act, but new judgments regarding the way in which the human faculties ought to be exercised. We are living in a commercial era. It has made the tour of the world. Exploration, discovery, the taking in of fresh territories, and more intense cultivation of areas already occupied, have transformed our globe into one huge market, and a really "closed State" has become impossible. Science is the mother of these world-industries. But science, which can produce practically ad infinitum, in spite of Malthus, knows not as yet how to distribute its products so as to fulfil Huxley's demand. It cannot "fit as many as possible to survive."

For look at the facts and figures. Social misery is always with us in the shape of a residuum, to be counted by millions, who are on the brink of desti-Degeneracy has become so menacing that Royal Commissions make it the subject of their inquiries. Crime does not diminish, though it changes its character from violence to cunning and robs where it used to commit murder. Outrages due to the animal passions are everywhere greatly on the increase. Low birth-rates, as we have seen, bear witness to the number of fraudulent marriages, never so fre- reconomics are the direct result of our quent or so largely approved at any previous time in our national history, which from this point of view is now comparable to that of the declining Roman Empire. Divorces have grown to be familiar among the wealthy classes; desertion of wife or husband, and separation by the magistrate's flat, among the working people. Speculation, betting, games of hazard, form the business or the amusement of women no less than men, to a degree which would have struck a generation not so bent on gain dumb with surprise and amazement. The drink-problem baffles legislation, confounds the preacher, and is explained by the physician as arising from nervous demands made by an overwrought temperament, by the high pressure at which every one lives, and the consequent feeble reaction to normal stimulus. Cynicism, pessimism, and other less describable tones, may be heard at dinner-tables, color conversation, have their schools in literature, and form no insignificant chapter in current politics and philosophy. There can be no question that, as a materialized civilization spreads in towns and even in villages, the rate of mental disturbance rises and asylums mark its growth. Last of all,

suicide, laying its dreadful grasp on children as well as their elders, closes the tragic record. Suicide is the most appalling result of a social order from beneath which the moral and religious supports have been, to an incredible extent, withdrawn.

Whatever lights may be stolen into this picture by an apologist for things as they are, the shadows remain. Facts and figures, I repeat, tell this melancholy tale. A general impression, not to be reasoned away by columns of prosperous imports and exports, does but confirm it. Our economics have not resolved the problem of national security at home or abroad. And our accepted philosophic teaching. It has been purely atomic, aggressively individual. Why was it so? Because, when it had flung away in flerce disdain the old religious principles, it could preach no other than self-interest. We know that it tried hard. The patriarch of modern wealth-producing science, Adam Smith, after he had written his Old Testament of moneymaking, added to it his New Testament of love, which he called "sympathy." The "wealth of nations" was to find its justification in the "moral sentiments." A whole literature followed him up, or rather was derived from his ancestor Rousseau; it bore on its flag the device termed by Auguste Comte "Altruism," by Stuart Mill "Utilitarianism." In either case it was maintained that the self-regarding instinct of our nature is not the whole of it. Luther's doctrine of "total depravity," which experience as well as the ancient Churches called in question, was thrown aside, and man came forth from Rousseau's transforming process "naturally good," corrupted only by institutions. It was to this principle of "solidarity" that Professor Huxley would have turned for help towards the victory over what he combats as "the fanatical individualism of our time." We note his admission that such has been the result hitherto of a philosophy which interprets evolution without God. But we cannot perceive any solid hope for the future in a mere utilitarian motive, not even when its object is society at large.

First, we say, the evidence of our own age tells against it. Men are endowed with an instinct of sympathy or fellow feeling, which prompts them to seek the happiness of the tribe as well as their own. Be it so. But when religious motives fall away, and men no longer seek to do the will of God, because whether there be any God they do not know, after what fashion, in what measure, will the sympathetic instinct have its course? Are periods of unbelief distinguished as periods of active benevolence? At any rate, is it true that the enormous operations in business which rule over and shape our daily lives, our commerce, politics, wars in South Africa, schemes of taxation, alliances and enmities, are striking examples of the philosophy which keeps in view its neighbor's good? Do trusts, combines, monopolies, and the stealing of public "franchises" in the United States prove that the "ethical best" is the rule of Wall Street? Shall we, in these and the like transactions, most of which set themselves clearly above the Law, acknowledge a moral greatness not attained by the Gospel? Nothing can be more certain than that fullionaires are the kings, irresponsible and despotic, of the American Democracy. Just as little can it be denied that every year sees us in England drawing closer and closer to the American system. Is it one, then, of enhanced and expanding altruism? Or is it something altogether different, which illustrates much more decidedly the cosmic process than the fitting of as many as possible to survive?

In the conflict with such a new

"Golden Rule," what can be the result of "ethical endeavor," scattered, private, and without a sanction to reward its martyrs when they die? Like the co-operative movement, it may begin nobly, but forces, atmosphere, and interests will combine in our Western world to turn it astray, to give it the appearance of a sect, to detach its members from it as the common life, not the unselfish, makes more demands upon their strength and absorbs their hours.

At the best it will be a demonstration, not a campaign. For it is the attempt to put in practice a mere abstract proposition, to live upon a maxim and a formula. When we talk of the social instinct as, in some sense, balancing the instinct of self-preservation, we do not mean any copybook heading—we mean that human creatures were intended to find and to realize the better life in a well-ordered home. That is a law, not a maxim; and it will be obeyed, or else it will be revenged.

Here, to my mind, is the knot and here the dénouement will be found of all our English anxieties, which though but obscurely felt are none the less urgent. If agnostic principles mean anything whatever, they will bring after them a new conception of life, private and public, from which none of our institutions can be exempt. Well, then, let us hear a teacher who is never obsolete; let Edmund Burke instruct us while he looks with piercing insight upon the movement that inaugurated these changes in France and is now planting its trees of liberty on English soil. "All other nations," he tells his Parisian correspondent in 1790, "have begun the fabric of a new government, or the reformation of an old, by establishing originally, or by enforcing with greater exactness, some rites or other of religion. All other people have laid the foundations of civil freedom in severer manners, and a system of a more austere and masculine morality." ³ Burke held, as all wise men before him, that "religion is the basis of civil society"; and he feared that if Englishmen should throw off "that Christian religion which has hitherto been our boast and our comfort, and one great source of civilization amongst us, and amongst many other nations, . . . some uncouth, pernicious, and degrading superstition might take the place of it." The so-called "Positive philosophy" reveals itself in these lineaments. ⁵

How now would Burke have judged concerning our "austere and masculine morality," could the tables have been laid in his view which assure us that England's homes are withering under a Malthusian blight? In what scathing terms would he not have denounced the rage for speculation which fills our courts every day with bankruptcy cases, cases of embezzlement and fraud, misrepresentation of facts, and all the shameful, sordid comedies, crossed by a line of blood, that from year's end to year's end furnish reading to a deluded and victimized nation? For these crimes are on the broadest scale. The shock is felt like an earthquake when some Jabez Balfour, putting religion into his prospectus, exploits it as a commercial asset and slays his ten thousands; or when a Whitaker Wright, on receiving the sentence of his villainies, takes poison and expires almost at the feet of the Judge. But "severer manners" do not mark that the shareholding world has repented. The new year will bring fresh balancesheets not more to be trusted; gambling will be, yet more feverishly, the business of Englishmen; and there is little hope that divorce or fraudulent marriages will decrease.

But granting all this [the Agnostic may rejoin], how does it show that I

and my Agnosticism are in fault? Am I not myself a pattern citizen? Am I the keeper of marauders on the Stock Exchange? Your Balfours, Whitaker Wrights, and other cancerous growths of the social system, were not Agnostics, but, as a rule, professing or even active Christians. Why blame me for delinquencies in which I have taken neither scrip nor stock?

It is a fair challenge. We shall endeavor to meet it fairly and squarely, as it deserves. But first remark thus much. If our allegations are trueand we have borrowed them from official documents-no one can deny that a revolution in manners, ideas, and practices, affecting the very basis of life, is passing over society. Modern finance, with all its destructive consequences, is itself an effect due to the principles admitted and acted upon by modern nations; and that those principles are not the "ethically best," according to Professor Huxley's definition, surely needs no proof. Whether we quote the Standard Oil Trust in America, or instances nearer home, or again at Johannesburg, we may apply the gentle criticism of Disraeli in his fragment just given to the world; they are "transactions in which a fuller and larger degree of Christian forbearance might be desirable." The last words we should dream of using about them are that "in place of ruthless self-assertion" they "demand self-restraint; in place of thrusting aside, or treading down, all competitors," they "require that the individual shall not merely respect, but shall help his fellows." Wherever else these rubrics of sympathy hold, it is not in company-promoting, nor is a "combine" yet ascertained to be the goodly fellowship of the saints. Promoters may be, in their own persons, church-goers and communicants; but the system by which they thrive and which overshadows laws, commerce, love, marriage, and the future of the nation, is founded on

⁸ Burke, ii., "Reflections on the Revolution in France," p. 311.

⁴ Ibid. pp. 862, 363.

a murderous rivalry between the strong and the weak.

That such a system could not be tolerated: that it would undergo reform or be swept away, if Christian ethics got the upper hand, is certain. spirit of laws and not their letter determines how they shall find obedience. Not the wildest of dynamite apostles can charge upon the New Testament or on orthodox pulpits that merciless idea of competition which represents the "cosmic process"-as it is understood by Darwinians-transferred to society. How, then, does it happen that a syndicate of millionaires is governing whole peoples either in defiance of law or with its connivance, and that public opinion is languid or indifferent. or admires and envies the successful exploiter of his fellows? I am not pretending that a universal silence gives consent to the usurpations of money-lords; or that protests are not made here and there which may lead to better things in time. But this I do say, that we should not now find ourselves in a crisis of morality and civilization had the principles on which religion was once acknowledged not suffered severely at the hands of men -themselves often superior to their unbelief-who made it out to be a delusion, a sort of mirage or cali miracula vana, while the present world alone was real and worthy to be taken into account.

"Hesitating in the moment of decision, sceptical, puzzled and unresolved"—these are the epithets which Burke finds applicable to a man who has lost his first principles.' Will any one say that it is not a description of large numbers fallen a prey to the incoherence of latter-day teaching, pupils, so far as negatives are concerned, of the Agnostic who has supplanted the Christian? But to besitate in moral conjunctures is to be lost, True marriage,

* Burke, ubi supra, p. 350.

homes undefiled, clean hands in trade, call for every degree of courage up to heroism; what need of all that if in a few years or days the curtain falls never to rise again? "Life has only a present and passing value; let us enjoy Such must be the reasoning of ordinary folk when their creed is demolished by the philosopher who declares that science is all the knowledge we have, and that to science God and the soul are unknown quantities. Can we for a moment suppose that the nescience thus enforced by authority will create motives of action equivalent to the promises held out by faith? It will create a vacuum, and appetite will rule where religion is dead.

Believers have always insisted on these consequences to society of taking from it, as our ancestors would have spoken, the fear of God and the expectation of His judgment. If I make a point of quoting from a great conservative teacher such as Edmund Burke, my reason is that the prophecies he uttered a long hundred years ago are in course of fulfilment before our eyes. But it has been so ordered that confirmation strong should be given them by agnostics of a later date-yes, and by the prince of agnostics, Mr. Herbert Spencer. That witness, mournful and emphatic, spread over the concluding pages of his recently published Autobiography, deserves the most careful attention; at all events, it will not be suspected as either clerical in texture or due to any motive but the overpowering force of truth. Mr. Spencer declares as follows:

Many have, I believe, recognized the fact that a cult of some sort, with its social embodiment, is a constituent in every society which has made any progress; and this has led to the conclusion that the control exercised over men's conduct by theological beliefs and priestly agency, has been indispensable. The masses of evidence classified and arranged in the *Descriptive*

Sociology have forced this belief upon me independently; if not against my will, still without any desire to entertain it. So conspicuous are the proofs that among unallied races in different parts of the globe, progress in civilization has gone along with development of a religious system, absolute in its dogmas and terrible in its threatened penalties, administered by a powerful priesthood, that there seems no escape from the inference that the maintenance of social subordination has peremptorily required the aid of some such agency.

What a clamor and a protest would not these words have called forth had Leo XIII. written them in one of his Encyclicals! Burke has expressed a sentiment which they almost over-color in language far more beautiful. He describes the English people of his own day as thinking themselves bound "in their corporate capacity to perform their national homage to the institutor, and author, and protector of civil society. . . . They conceive," he says, "that He who gave our nature to be perfected by our virtue, willed also the necessary means of its perfection. He willed therefore the State. He willed it in connection with the source and original archetype of all perfection." And thus the State itself becomes not, as Zarathustra terms it, a mere "refuge of the superfluous," but "a worthy offering on the high altar of universal praise." *

Yet that is not all. Mr. Spencer informs us that

this change of feeling towards religious creeds and their sustaining institutions has resulted from a deepening conviction that the sphere occupied by them can never become an unfilled sphere, but that there must continue to arise afresh the great questions concerning ourselves and surrounding things; and that, if not positive answers, then modes of consciousness standing in place of positive answers, must ever remain. 10

Habemus confitentem. The agnostic, in these remarkable passages, and the rest which I cannot here set down, proclaims that religion, as it is an everlasting, in like manner is it a social necessity. The empty negative, which leaves only a "cosmic process" of devouring and devoured, will create and sustain nothing human. On the other hand, it cannot fail to produce, as we may see for ourselves in the nations that suffer from it, and as Spencer lamented, an "indifference to everything beyond material interests and the superficial aspects of things." rance of God lies at the root of social anarchy. It is fatal to genius. It has no words of condemnation for prudent vice. It has never yet convinced the pleasure-seeker that he had any duty to others except to get enjoyment out of them. The evidence is abundant and is accumulating that the agnostic negation is not simply negative. Under its influence, precepts most positive, shaping the creed of no small number, have risen from the deeps. When we look at the ways of business, fashion, literature, and at social statistics, a new Decalogue appears in view. What are its commandments? I seem to read among them these: "Thou shalt make money, have no children, commit adultery, plead in the divorce court, and such duties done, commit suicide." Not the individual only, but the nation, if it loses its old Christian prejudices, will enter on this journey towards Hades. The test and proof that a mistake has been made by our agnostic philosophers are to be found in the national decay which follows on their teaching, as darkness follows on eclipse. And by national decay nothing else is meant than the suicide of the race, consequent on frauds in mar-

10 Spencer, "Autobiography," p.469.

Spencer, "Autobiography," ii. 467.

⁹ Burke, ii. p. 370.

riage, a dwindling birth-rate, unlimited divorce, degeneracy in offspring, the abuse of stimulants and of pleasure, the clouding of intellect, all which are fated to terminate in one disease—the denial of the will to live. Professor Huxley, to hinder this consummation, falls back on Christian ethics, which cannot flourish when the Gospel has been rejected. Mr. Herbert Spencer concludes a life spent in preaching The National Review.

agnostic science by affirming its bankruptcy in the past, its hopelessness in the future. We could not wish for a conjunction of proofs more formidable and more unexpected in support of Burke's great political axiom, that "the institutor, and author, and protector of civil society" is 'One whom our modern teachers refuse to have in their knowledge.

William Barry.

ON WEIGHING ATOMS.

To those who cull their knowledge of current science partly, at least, by means of occasional glances at more or less distorted images of single facets, such as are to be seen from time to time in the columns of the daily papers, I fear the title of this article may suggest that it is somewhat belated. Atoms! I hear them say, what is he thinking about? There are no atoms now, they have all been cut up into electrons and corpuscles. Who cares about the weights of the atoms at the beginning of the twentieth century?

And yet never, perhaps, since Dalton propounded his atomic hypothesis a century or so ago has the existence of these hypothetical particles seemed quite so probable, quite so believable as to-day. True it is that within the last few years some of our ideas about the chemical atoms have been modified profoundly. The hydrogen atom is no longer considered the smallest particle. If radium be indeed an element-and no one can deny that it exercises many of the functions of an element-then the atoms of Dalton can no longer be regarded as indestructible individuals, but rather must be looked upon as congeries of still smaller bodies, each atom forming a kind of diminutive heavenly system, so to speak, such as we might picture to ourselves by thinking about what we should see, or of what we should not see, if we gazed upon the heavens through the wrong end of an immense and powerful telescope. Yet, after all, the idea of the chemical atom remains, and the part it plays is not less but even more important than of yore. Still, the basis of most chemical speculation, the hydrogen atom, now, in addition, affords the physicist a jumping-place, whence he may start on some of his amazing flights into the regions where matter, energy, and electricity dissolving, as it were, into one another, almost escape the scrutiny even of his penetrating glances.

Here, then, is my excuse—and you have only to read Professor J. J. Thomson's lecture on "Bodies smaller than Atoms" to see that it is a good excuse—for asking the readers of the Cornhill to hark back, and dwell for a moment on such an old-time subject as the methods of weighing the chemical atoms.

In the last number of the Cornhill I endeavored to give those who are interested in matters of this kind a peep into the processes by which science has succeeded in weighing the earth, the sun, and other members of the heavenly constellations. The great difficulty, or rather one of the great

difficulties, in weighing the earth is its bigness. We not only cannot by any means get the earth into a scale pan, but we cannot even form a mental picture of such a process. When we contemplate the exploit of weighing an atom our difficulties are of the same order, but of the opposite kind. For atoms, if they exist, are far too small to be isolated. Think how many chemical atoms go to make up a single cubic centimètre of water, that is about as much as would go inside the shell of a small filbert, say, about 90,000,000,-000,000,000,000,000 (ninety thousand million billion), and you will realize the nature of the task which John Dalton, of Manchester, presented to science when, by formulating his Atomic Theory, he made it an object to determine the sizes and masses of the atoms of the elements. How were Davy, Wollaston, and their colleagues, expert experimenters though they were, to perform a feat like this with the means then at their disposal? How were they to weigh bodies that could not be seen by means of the most powerful microscopes, nay, to be exact, bodies which very possibly might exist only in the minds of Dalton and his followers? Let us see how this task has been accomplished.

From the earliest times philosophers have pondered on the constitution of matter. Does everything consist of grains held together by some attracting force, or is matter continuous, homogeneous, much as a jelly seems to be to the human eye? That is the question. The poet-philosopher Lucretius and others among the ancients, and in more recent days the great Newton, ranged themselves on the side of the atoms; the latter declaring that to him it seemed probable "that God in the beginning formed matter in solid, massy, hard, impenetrable, movable particles, . . . and that these primitive particles. being solids, are incomparably harder than any porous bodies compounded of them; even so very hard as never to wear or break in pieces, no ordinary power being able to divide what God Himself made one in the first creation." And, finally, John Dalton, the greatest of the "Atomists" as those who upheld the grained structure theory of matter were once designated, placed the atomic hypothesis on a firm foundation by showing how it might be applied to the elucidation of chemical phenomena.

Let it be admitted that the matter of the universe is composed of minute. invisible particles, which have never been broken down or destroyed in the various physical and chemical changes to which we have subjected them, except conceivably in certain special cases connected with radio-active change. Let it be admitted, further, that there are as many kinds of atoms as there are chemical elements, say, about eighty, and that the weight of the atom of each element differs from that of the atom of every other element known to us. Then the question is, How can we compare the weights of these eighty different kinds of atoms?

Dalton himself made courageous attempts to solve this problem. But he was at a great disadvantage. He was able to give us reasons for thinking that the weights of the atoms of different elements are unequal, but to weigh them correctly was not yet possible in his time. In some cases he was able to state, approximately, the proportions in which the better known elements combine. He knew, for example, that in water one part of hydrogen is united with eight of oxygen. 1 But Dalton and his colleagues could not tell us whether these proportions of hydrogen and oxygen correspond to the union of one atom of hydrogen with one atom of oxygen or to the union of two atoms of hydrogen

I Dalton's value was somewhat lower than this.

with a single atom of oxygen, or to some other more complicated arrangement. And thus for a long time but little progress was made, except perhaps in Italy, where the delicate perceptions of Avogadro enabled him, as early as 1811, to recognize the existence of a silken thread which might have guided us into the right path many years before most of the chemists actually walked there.

Is it not plain that if all matter consists of minute indivisible particles which conform to a very limited number of types, and if all the thousands of compounds known to chemists are produced by the joining together of these atoms in various numbers, then there must be two distinct classes of particles to be considered-first, the atoms, and, secondly, various groups of atoms; each particular group probably corresponding to a given element, or to a given compound substance? In these latter groups, the mblécules intégrantes of Avogadro as distinguished from the molécules élémentaires or atoms, we have the molecules of the modern chemist.

The obvious distinction between the atoms and molecules of the gaseous elements was recognized by Avogadro and Ampère at a very early stage: But it so happened that in their hands it was only fruitful when applied to the gases. And thus a quarter of a century elapsed before their ideas on this subject, and before Avogadro's famous hypothesis on the constitution of the gases, which teaches us that "in elastic fluids"-gases-"observed under the same conditions the molecules are placed at equal distances," bore their predestined fruit in the hands of his eminent successor, Jean Baptiste André Dumas and of those who followed him.

As it would be impossible within the limits of half a score pages to give even a passing glance at the individual labors of the small army of chemists who have struggled with the problem of weighing the atoms, we will now drop the historical details of our subject, and turn our attention to its broader aspects.

Let us see exactly where we stand. According to the teachings of Avogadro. Ampère, Dumas, and the modern chemist, matter exists in two distinct states of subdivision. First, there are the atoms, which as far as we know are quite indivisible by chemical means. Secondly, there are groups of atoms held together by some kind of attraction, and constituting the larger particles called molecules-a definite group corresponding to each element and to each compound; the distinction between elementary and compound molecules in terms of the atomic hypothesis being this, that in each of the former all the atoms are similar, and that the molecule may even consist of a single atom, whilst the molecules of compounds must contain, every one of them, atoms of at least two different kinds. Then, in addition, Avogadro's hypothesis teaches us that equal volumes of gases, if measured at the same temperature and pressure, contain equal numbers of molecules. This last statement is not absolutely true, but it approaches the truth sufficiently nearly for our purpose. equally when applied to elementary gases like oxygen and hydrogen and to compounds like steam, which is composed, as we know, of oxygen and hydrogen, provided that the steam is really in the gaseous state, that is, if it is at a sufficiently high temperature.

Now, what Avogadro's hypothesis does for us is this. It enables us to get round the difficulty created by the excessive minuteness of atoms and molecules. Because if equal volumes of two gases contain equal numbers of molecules, then from the behavior of these equal volumes, or of any other

known volumes of these gases, when they react with one another or with other gases, we can draw conclusions as to the behavior of single molecules. For example, under suitable conditions two volumes of the gas hydrogen will combine with one volume of oxygen, and produce two volumes of water in the form of steam. It does not matter what volumes are taken; they may be cubic inches, pints, gallons, cubic centimètres, what you will, provided that they correspond to the proportions mentioned above.

Now suppose that in a given case the one volume of oxygen contained one billion molecules of oxygen. Then would it not follow from Avogadro's hypothesis that the two volumes of hydrogen contained two billion molecules of hydrogen, and that the two volumes of steam produced by their combination contained two billion molecules of steam?

But if this is so, then one billion molecules of oxygen will unite with two billion molecules of hydrogen and yield two billion molecules of steam; or, dividing each of these numbers by one billion, we find that one molecule of oxygen will unite with two molecules of hydrogen and produce two molecules of steam.

Thus, the hypothesis affords us a bridge, as it were, by which we can pass from large volumes of gases which we can handle to the minuter molecules, which individually are invisible, intangible, and only to be clearly conceived, in fact, by the exercise of a well-trained imagination.

Before we proceed to apply the teachings of Avogadro in our attempt to solve the problem of weighing an atom, there is one other illustration which will help us to realize its value. It is easy to see that in each molecule of a compound there must be at least one atom of each constituent element, and, accordingly, that such molecules must

be made up of two, three, four, or some larger number of atoms. But it is by no means equally easy to form an opinion about the molecules of the elements; to decide, for example, whether these consist of single atoms or of pairs, of triplets, or of yet more complex groups. Now this is a question of considerable importance.

We know, as has already been explained, that one volume of oxygen will combine with two volumes of hydrogen and produce two volumes of steam, or, substituting as before molecules for volumes, that a molecule of oxygen will unite with two molecules of hydrogen and yield two molecules of water in the form of steam. This tells us just what we want to learn. For since there must be at least one atom of oxygen in each of these two molecules of water-that is, atoms of oxygen in the two molecules of water taken together-it is clear that the molecule of oxygen from which they were produced must itself have contained at the very least two such atoms, for it would be inconsistent with the whole body of chemical knowledge to suppose that a single atom of any kind is created in the course of any chemical change. By similar experiments, supplemented by similar reasoning, we can arrive at the constitution of other elementary molecules, and we find that while hydrogen molecules and many others are diatomic like oxygen, others again are differently constituted, some, e.g. ozone, the more active phase of oxygen, being composed of three atoms, others of four, and so on; whilst some, for example quicksilver and argon, have molecules which are composed of single atoms.

Before we may hope to follow the processes, simple as they are in principle, involved in weighing an atom, we have still to gain a really definite idea of what it is we want to weigh. At present we are too nearly in the position of the chemists of a century ago, for it was just the want of a really definite and correct idea of an atom that made it so difficult for Dalton and his immediate successors not only to fix atomic weights, but even to argue with one another comfortably about them. Let us, then, endeavor to throw our notions into a more precise form.

Every one is familiar with the element carbon, which exists in the forms of soot, diamond, and black lead. Most of us know that carbon is one of the most important of all the elements; that its compounds are vastly more numerous than those of any other single element, and perhaps more numerous than those of all the other elements taken together; that it is one of the chief components of the tissues of all animals and all vegetables. And some, perhaps, are aware that many of the carbon compounds are gases, or become gaseous at high temperatures, and that, consequently, this element lends itself well to our purpose. Therefore, let us try to answer the question, What do we mean, exactly, by an atom of carbon?

Since atoms have never yet been divided in ordinary cases of chemical change, and since they unite to form the larger and more complex individuals called molecules, one thing seems quite clear. If we can discover what is the smallest quantity of carbon that is present in any one of the molecules which contain carbon, we shall have a quantity which must correspond to the weight of one, two, or more atoms of that element: a weight which may be greater than that of an atom of carbon. and, if so, must be an exact multiple of its atomic weight, but which cannot be less than the weight of a single atom of carbon, since no molecule can contain less than an atom of any constituent element. These considerations

carry us a step forward, and plant our feet on comparatively firm ground, but they leave us in need of a standard of reference.

In the earliest attempts to compare the "weight" of the earth with the weights of the heavenly bodies, it was found impossible, for a time, to express the values calculated from astronomical observations in accordance with any of the common standards such as the gram, the ounce, or the pound. Accordingly, the earth itself was adopted as the standard, and was said to have the density 1; the density of the sun, which is one quarter as great as that of the earth, being expressed by the figures 0.25, that of Venus and Mars as 0.9, and so on. We meet with exactly the same difficulty in the case of the atoms. It is true that it is possible to make shrewd guesses at, or perhaps I might say to estimate, the weights of atoms, and one of these estimates puts the weight of an atom of hydrogen, for example, at about the forty-million-million-millionth part of nine one hundredthousandths of a gram, a gram being 151/2 grains; but for several reasons it is thought sounder to take an atom of hydrogen as our standard, and, for the sake of simplicity, to say that this weighs 1; hydrogen being chosen because its atoms are the lightest, although there are certain practical objections to the selection.

Now suppose we were to obtain and analyze samples of all the compounds formed by hydrogen with other elements, and also samples of every compound containing carbon, and in this way ascertained the respective proportions of hydrogen and carbon in 100 parts of every compound. And suppose, further, that we determined also the weight of the molecule of every one of these compounds. Then, by doing a number of sums in proportion we could find what proportion of hydrogen is present in a molecular weight of each

compound containing hydrogen, and what proportion of carbon is present in a molecular weight of every compound containing carbon. If we did all this I think we should discover the smallest quantity of carbon in a molecular weight of any carbon compound to be twelve times as great as the smallest quantity of hydrogen in a molecular weight of any compound of hydrogen, and I express this opinion by saying that atoms of carbon are twelve times as heavy as atoms of hydrogen.

In practice, however, we have to content ourselves with something far less exhaustive than the tremendous research outlined in the previous paragraph. There are thousands and thousands of compounds containing carbon and hydrogen. We do not know the composition of all these compounds, and we do not know their molecular weights in every case, and therefore we must be satisfied with some scheme far less ambitious than the ideal one which I have put before you. might, for example, find the composition and molecular weights of as many compounds of carbon and of hydrogen as circumstances permit, and then, because we can do nothing better, take for the weight of an atom of carbon the smallest quantity of carbon we have found in a molecular weight of any compound containing carbon, compared with the smallest quantity of hydrogen found in a similar manner in a molecular weight of any compound containing hydrogen. The atomic weight of carbon thus arrived at is 12. If we extend the idea of an atom as thus defined to the other elements, you will see we may say that the atomic weight of any element is the smallest weight of that element yet discovered in any molecule containing it compared with the atomic weight of hydrogen ascertained in a similar manner and taken as 1. In short, the atomic weights of the chemists give us the relative weights of the atoms. They tell us that carbon atoms are twelve times as heavy as hydrogen atoms, oxygen atoms sixteen times as heavy, and so on; but since we do not definitely know how many hydrogen atoms go to make a gram, we cannot give any similar information about the weights of the other atoms either. We are not, in fact, quite so far advanced in the process of weighing the minute atoms as in that of weighing the great globe, the earth. Nevertheless, even in this direction, as has already been said, a certain amount of progress has been made.

I hope that now my readers have gained in a general way a tolerably distinct idea of what we mean by the weights of atoms, and that they realize the part played by Avogadro's hypothesis in fixing these weights. If equal wolumes of two gases contain equal numbers of similar molecules, is it not clear that the weights of these equal volumes must be proportional to the weights of the individual molecules which compose them; and that if we desire to learn the compositions of the molecules of the two substances we have only to analyze equal volumes of them in order to discover what we wish to know?

Guided by these considerations, we see that to ascertain the relative atomic weight of an element we must analyze as many compounds of the element as possible, deduce the molecular weights of these compounds from their densities in the gaseous state, as indicated by the famous hypothesis of Avogadro; and then take as the atomic weight of the element the quantity present in a molecular proportion of that compound which contains the element in the smallest proportion. The actual process of weighing an atom is not, truly, by any means so simple as

² The weights of equal volumes of gases are known as their densities.

my words suggest. There are two serious sources of error. First, it is not easy, though it has been done in some cases, to compare the weights of equal volumes of gases very exactly. Hence molecular weights based upon the densities of gases are apt to be less close to the truth than we could wish. Secondly, much depends on the chemist including among the compounds he analyzes that particular compound which contains the element he studies in the smallest proportion; on his being able to prepare that compound in a highly purified state: on its being a substance which lends itself to exact analysis, and also one whose vapor density can be determined. Thus there are many pitfalls, and failure, as you will perceive, on any single point may be fatal to the final result.

Some one has said that an essayist is, or ought to be, an ambassador from the realms of literature, science, or art. I take it to be the business of such an ambassador to enlighten rather than to teach: that it is his duty to treat the subject of his essay broadly rather than minutely; to avoid rather than to revel in details; and, above all, to put aside every kind of technicality if he can possibly create the impression he desires without it. He may even invent ·illustrations, and use his inventions in the place of real cases in order to keep clear of the complexities which so frequently overlie scientific investigations and hide the truth from those who look on from the outside. And I ought perhaps to confess here that in the preceding pages I have exercised my function as an ambassador in a liberal spirit; that though I have given, as I believe, a true picture of the ideas on which the method of weighing atoms is based, my account of the matter is really a picture and not a photograph. So little is this account photographic, in fact, that if, within the next few days, any of my readers should turn over the pages of a book on the fixing of atomic weights, they might perhaps rub their eyes and wonder what bearing the matter in the book could possibly have on the process of atom-weighing as described in this article. Nevertheless, my account is not a dream; it really tells you what the chemist tries to measure in his researches on the weights of atoms, and shows, in outline, the foundations on which his methods of compassing his object rest. But having now broken ground, and given, as I hope, sound ideas if but little knowledge of our subject, I shall treat the remaining portions somewhat differently.

I have already said how very difficult it may be to follow precisely the line of work suggested in the earlier parts of this essay. Even if this were not so, however, we should still seek light from other directions. In science, as in the law courts, we are compelled sometimes to rely upon the evidence of a single witness-that is, on a single fact. When two facts seem to be in conflict, we may be driven to decide which is the more credible of the two. But we prefer, of course, to have independent confirmatory evidence before us, and as much of it as possible. Hence ever since the problem of weighing the atoms was first seriously attacked, chemists have been on the lookout for new methods. We want, first, further methods of weighing molecules. so that the ideas expounded above may be applied in the case of substances which have not been made gaseousthat is to say, to cases which are not covered by Avogadro's hypothesis; and, secondly, science demands further methods of weighing atoms, in order that we may control the results obtained by working along the lines already suggested.

Fortunately, as we shall see, atoms and molecules have other measurable qualities besides mass, and thus the resources we seek are at our disposal. These resources, in fact, though not exactly abundant, are sufficiently varied and extensive to compel us, here, to restrict our attention to a few illustrations. First, let us consider the case of the molecules.

Avogadro has shown us how to deduce the relative weights of the molecules of gaseous substances from their densities, but unfortunately many substances cannot be made gaseous. Raoult, the French physicist, has come to our aid here, and has taught us how to weigh the molecules of substances when they are dissolved in water or other solvents.

Unfortunately, again, some stances, when heated to the point at which they turn into vapor, do not merely undergo a physical transformation like that which occurs when water is converted into steam, but are for the time being destroyed-that is, converted into new things altogetherwith the result that if we calculate the weights of their molecules from their densities we draw completely wrong conclusions. Chemists have learnt how to detect these substances, however, and, moreover, have invented chemical methods of weighing molecules which can be applied to these and other cases of a similar kind. These two examples are very far from sufficient; they do not exhaust our resources nor do they fully cover the ground. But they will give a good idea of our resources, and, the reader's time and probably his patience being limited, they must suffice.

Raoult's beautiful method of weighing molecules is based on the freezing-points of solutions. Everyone knows that sea water freezes much less readily than river or spring water. This is due to the solid matter which sea water contains. And it is a curious and interesting fact, speaking generally, that adding a little foreign matter, such as sugar, to pure water not

only lowers the freezing-point of the latter, but acts in such a way that the effect produced is very simply related to the molecular weight of the solid dissolved, except in the case of solutions which conduct electricity. It may sound almost absurd, but is nevertheless true, that by observing the temperature at which a dilute solution of sugar freezes a chemist can determine the weights of the molecules of sugar compared with the weight of an atom of hydrogen. The process cannot even be said to be very difficult, for quite respectable results can be got by capable schoolboys after a little practice. All that is wanted is a chemical balance, a delicate thermometer, a few glass tubes and basins, some ice, and the power to use them. Nor is the idea of the method difficult to follow. If you take half a dozen suitable substances, ell of known molecular weight; dissolve weighed quantities of each separately in known quantities of water, so as to obtain dilute solutions; observe the temperatures at which these solutions freeze, and then, from your results, calculate the freezing-points of a set of similar but stronger solutions containing respectively a molecular weight in grams 3 of each solid to one hundred grams of water, you will find in every case that the calculated freezing-point is not far distant from-19° C. There are exceptions to this rule, but these can be accounted for; and thus, if we can determine the number of grams of a given substance which must be dissolved in 100 grams of water in order to produce a solution which will freeze at-19° C., we shall have its approximate molecular weight, unless the substance belongs to one of those classes which are known not to conform to Raoult's rule. Other solvents may be employed in place of water,

³ The molecular weight of "common salt" is 58.3; its molecular weight in grams, accordingly, is 58.3 grams.

and other physical properties—e.g. the temperature at which solutions of known strength boil—can also be made use of, but we must not dwell upon these here.

Soon after Dumas re-directed attention to the methods of applying Avogadro's hypothesis to the weighing of molecules, it was found that in certain cases it led to results which chemists were quite unable to accept. This brings us to a chemical method of weighing molecules.

The vapor density of sulphuric acid suggests that its molecule must be forty-nine times as heavy as an atom of hydrogen. Now no chemist can admit that this is correct.

When sulphuric acid is mixed with an alkali, such as soda, in certain proportions its acid qualities are destroyed -it is, as we say, neutralized-and if we analyze the new substance thus produced we find that the hydrogen of the original acid is gone and the metal sodium reigns in its stead. If, however, we vary the amount of soda used, if we take half as much soda as is necessary to neutralize a given weight of acid, or twice as much, or one-third as much, and so on, we discover, sooner or later, that we can get two distinct salts from sulphuric acid and soda, and no more. We find, moreover, that in one of these salts all the hydrogen of the acid is replaced by sodium, in the other only half. Now, if the hydrogen in the molecules of the acid exists there in the form of indivisible atoms, as the atomic theory asserts, does it not follow, since we can only expel this hydrogen in two stages, first onehalf, and then the second half, that each molecule of the acid must contain two atoms of hydrogen, no more and no less? But if this is so, if each molecule of sulphuric acid contains exactly two atoms of hydrogen, then that weight of acid which contains these two atoms-that is, for practical purposes, two parts of hydrogen—will be its molecular weight. Now analysis shows that ninety-eight parts of sulphuric acid contain two parts of hydrogen, and the chemists therefore say that its molecular weight is 98, not 49.

Perhaps you may ask, Does not this force us to abandon Avogadro's hypothesis? No, it does not do this. It only warns us to take care that we do not apply it to the case of a substance like sulphuric acid, which splits up when heated. And as usually it is not very difficult to detect such substances, Avogadro's hypothesis stands unshaken.

And now we must consider, in conclusion, one or two other characteristic properties of the atoms which we can apply in the operation of weighing them. One of the most remarkable and important of these, which can only be mentioned in passing, is connected with the shapes of the crystals into which they enter; another of equal importance, and more easy for laymen to follow, is their capacity for heat.

There is a familiar experiment in physics which consists in making several balls equal in weight but composed of different metals equally hot by placing them in boiling water and then quickly transferring them to a slab of wax. When this is done the metallic masses sink into the wax at very different rates, some melting much wax and making large holes, others melting little wax and making holes which are smaller. This is due to the fact that equal weights of different metals take up unequal quantities of heat when their temperatures rise through equal numbers of degrees, say, for example, from 0° C. to 100° C., and therefore, in accordance with a wellknown principle, give out unequal quantities of heat during the subsequent process of cooling. About the year 1819 it occurred to Dulong and

Petit to consider the effect of taking, instead of equal weights of the eleatomic weights, or rather quantities proportional to their atomic weights. Thus, the atomic weight of iron being 56 and that of copper and tin 63 and 118, they did not study the behavior of 1 gram or of 10 grams of each, but that of 56 grams of iron, 63 grams of copper, and 118 grams of tin. The result was very remarkable. They found that the quantity of heat required to raise an atomic proportion of a metal from 0° C. to 100° C., or through any corresponding range of temperature, was nearly the same in each case. Here, then, we have a new and splendid criterion to help us to fix atomic weights. The atoms of the elements have, approximately, equal capacities for heat. If a certain quantity of heat is required to raise an atomic proportion, say, 56 grams, of iron from the freezing-point to the boiling-point of water, then an approximately equal quantity of heat will be needed to raise an atomic proportion of any other metal through an equal range of temperature. When once this quantity of heat has been fixed, then to find the atomic weight of a new element we have only to ascertain by an experiment, not a very easy one however, how much of the new element absorbs this quantity of heat in passing from 0° C. to 100° C. This is, in effect, the famous rule of Dulong and Petit. The results obtained by its aid are not very exact, because the necessary experiments are not easily carried out under suitable conditions. But this does not very much matter, for we have the means of correcting them. A more serious defect lies in the fact that whilst the rule applies well to the metals, which form the majority of the elements, it does not do equally good service in the case of such elements as carbon, silicon, and boron. But here, again, forewarned is forearmed. We have only to be cautious when we study non-metals, and no harm will befall. Dulong and Petit's rule has done chemistry great service.

One more illustration, and I have done. From early days chemists have been in the habit of arranging many of the elements in groups or families according to their resemblances. When studying these groups they gradually recognized signs that there exists some connection between the properties and atomic weights of the members of these groups, and in 1864 an Englishman, Mr. J. A. R. Newlands, was on the verge, as it seems to us now, of fully discovering the law subsequently worked out by Professor Mendeléeff in Russia and by Professor Lothar Meyer. in Germany, now widely known as the Periodic Law, which enabled the former to predict the existence of a number of elements and to foretell their chief chemical and physical properties and their atomic weights. According to this law the properties of the elements vary periodically with the weights of their atoms, so that if they are arranged in the order of their atomic weights similar elements recur at somewhat regular intervals; the eighth element resembling the first, the ninth resembling the second, and so on, which enables us to foretell the properties of an element if we know its atomic weight, or to foretell its atomic weight if we are acquainted with its properties.. This state of affairs seems unlikely to be the result of mere accident-the chances against that are too great-and thus it affords us a distinctly useful means of checking atomic weights selected upon other considerations. The Periodic Law does not by itself enable us to make close determinations of the weights of atoms. But this does not much matter. For in every case, in practice, the actual selection of the atomic weight of an element is controlled by the fact that, as any given atom in combining with hydrogen must unite with one, two, or more atoms of hydrogen, the true atomic weight of the element must be an exact multiple of the quantity which

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will combine with a single atom or one part of hydrogen. This, however, brings up another subject—viz. the methods of fixing "the combining numbers" of the elements, which is far too big a matter to touch at this stage.

W. A. Shenstone.

FROM THE TOLL-BAR OF THE GALATA BRIDGE.

Who, that has ever visited Constantinople, can fail to remember the picturesque bridge which, by uniting the Port of Galata with the opposite coast, makes a convenient, though somewhat uneven, roadway by which the foreign tourist can proceed from his hotel at Péra to the wonderful mosques and bazaars of Stamboul?

To the fascinating Eastern city, built, like Rome, upon its seven hills, this bridge is, in one respect, what the Ponte Vecchio is to Florence, though with a difference. The two bridges are no more really alike than are the Arno and the Golden Horn, though both are prominent features in the landscape as the eye travels up or down the sunny expanse of rippling water. The resemblance, if it can be so called, is purely sentimental, arising probably from the fear that both bridges may be doomed to destruction at no very distant date.

If the capital of the Turkish Empire in Europe were ever to pass into the hands of the Giaour, the Galata Bridge would, probably, be one of the first relics of the past to be swept away in order to give place to something more after the pattern of Putney or Hammersmith, while the Ponte Vecchio, as most of us are aware, has only been saved from destruction at the hands of its own townsfolk by the intercession of the stranger.

In spite of its venerable and weatherbeaten appearance, the Galata Bridge

is not, in reality, what can be called "old" (for a bridge, at any rate)particularly at Constantinople, where, compared with almost every other building of importance, it is decidedly modern. It was constructed as lately as in 1845, by the grandmother of the present Sultan-who derived a large income from the tolls-in the place of a bridge of boats, which connected the Kapan with Azab Kapu, in former days, so that it must have grown prematurely old, simply by reason of the immense amount of traffic that is perpetually passing over it, just as the heart of a man may become aged and worn when it is continually a prey to recurring and varied emotions. It is fashioned, for the most part, of graylichened wood, loosely jointed together, through the holes and crevices in which one can look down at the twinkling waters of the Golden Horn, that are said, just here, to be of enormous depth. Towards the centre it hunches up its back like the dorsal bone of a mammoth, and the great iron ribs and girders that intersect it at regular distances seem as if they would almost shake soul and body asunder every time that one jolts or clatters over them upon wheels. In the evening, when, beyond the heights above Stamboul, the mosques, and minarets, and pointed cypress-groves rise sharply defined against the brilliant hues of the sky, the scene is impressive in the extreme:

A blaze of lurid gold, and daylight sets Behind the cypress-spires, where dead men lie

Beneath their turban'd tombstones, and the sky

Is dappled with the hue of violets;

Here gleams the Golden Horn, with fishers, nets,

And all the fleet of varied ships that fly

The flags of half the world, and there, on high,

The city with its mosques and minarets,

while, at this same hour, when "daylight sets," the great dome of the Yeni Valideh Mosque might almost seem to be a purple mountain, overshadowing that part of the bridge which is nearest to the Stamboul side.

A stranger, taken to this bridge for the first time and set down upon a camp-stool close to one of its toll-gates, might well be excused for imagining that almost every sort and condition of man and beast were defiling past him for his own special delectation and amusement. No two figures, or groups of figures, are alike, as they go streaming and jangling over it all day long, from year's end to year's end, without seeming ever to pause for even a moment to take breath. Here are only a few of them: A small black brougham, or coupé, containing three pale, moonfaced, ox-eyed ladies of the Imperial harem, their dusky, long-legged guardian grinning and displaying his white teeth upon the box-seat. A fat Pasha, arrayed in full regimentals and wearing numerous decorations, caracoling along upon an Arab charger, with floating tail and dancing fly-flicker, followed by two aides de camp in shabby threadbare uniforms, mounted upon ungroomed steeds. A lumbering, creaking farmer's wagon, laden with cooped poultry and melons, drawn by a couple of black, white-eyed water buffaloes, their necks decorated with light blue china beads, as a protection against the evil eye, escorted by a handsome young countryman in a turban, rolling along, in ragged but picturesque garments, his feet and legs bound round with string, like parcels, and bearing in his hand a long green cane, with which he occasionally prods and tickles the patient creatures under his charge, although he must know quite well that no amount of prodding or tickling will ever induce them to quicken the snail's pace that is theirs by right of inheritance. The cake and sweetmeat man comes tramping along next, the little three-legged table upon which he displays his wares slung to his back, his head confronting the advancing foot passengers in a butting attitude, and two French Sisters of St. Jacob, with flapping white caps, step out into the roadway to let him pass. These kind Sisters bring up, and educate, little female waifs and strays of all denominations, and instruct them in needlework and in the mysteries of "the one true Faith." Report says that, by purchasing the flesh of pig at a merely nominal price from the Mussulman peasants, by whom it is considered an abomination, these good ladies are enabled to carry on their benevolent projects upon very economical lines. These pigs, like the poor pariah dogs of the city, that lie curled up all day. often upon the very lines of the tramway, at their own imminent risk, and then go "on the rampage" every night at twelve-thirty (for I have timed them to a minute), are looked upon by the Turks as scavengers, and, therefore, as unclean and abominable. But if the Mussulman will not eat the pig, the pig -lean, long-legged, and with a terribly serviceable snout-is not nearly so fastidious. A friend of mine, riding out one evening among the hills, not far from a solitary village, came upon two of these creatures engaged in excavations in a graveyard, which, like most village burial-grounds in Turkey,

was unenclosed by wall or paling, nor could be succeed, in spite of all his efforts, in driving them away. (I hope these pigs were not of those that were afterwards sold to the worthy Sisters of St. Jacob!)

A family of tourists, English or American, now make their appearance; youths and maidens, and elderly ladies, clad, for the most part, in unbecoming raiment, and an old gentleman in spectacles who walks first and carries a "What I want to see," guide-book. says a tall good-looking girl in blue serge, wearing a round hat, as she stops dead short in the middle of the bridge, thus obstructing the traffic, "is that old Golden Horn of which I have heard so much!" and she throws up her chin in the direction of the Genoese Tower, as though expecting some manifestation from on high. A party of jolly jack-tars, from the British gunboat, in clean white suits, look round, smiling as they catch the familiar tones of their native tongue, but turn serious . immediately afterwards, doffing their straw hats, as they encounter the procession escorting a Greek funeral; the body, that of a young girl, exposed to view, according to Greek custom, tricked out in a garland of orange blossoms, a white ball-dress, with fan and lace pocket-handkerchief in one of the wan listless hands, and two poor little feet, in high-heeled white satin shoes, which wobble from side to side as the bier passes over the clattering iron girders. This is, no doubt, some poor young lady-a bride, perhaps, to judge by her wreath of orange blossom-who must have died somewhere upon the Stamboul side of the water, at Yeni Kapou, or some other Greek settlement, and who is being conveyed, thus, to her family vault in the smart new cemetery at Chichli, where have arisen, of late, so many imposing monuments. The tall girl, who is still seeking for the Golden Horn, stares curiously at the gorgeously robed priests chanting their lugubrious monotone, and then, catching sight of the corpse, starts, looks frightened, and hastens on in the footsteps of her family.

Now comes my old friend the dancing bear, led by a jovial, but ferociouslooking, nomad-a kind of mongrel gipsy-man, with gleaming, wolfish teeth and matted hair, who comes swinging along beating upon a "tomtom," followed by a wild-looking boy, playing upon a whistle-pipe. The poor bear looks downwards through the chinks of the bridge at the glittering water, and one can only guess at what may be passing in his mind! He does not even look up now, when a whole flock of sheep, "ring-streaked" and parti-colored, like the flocks of Jacob, hailing from the Balkan plains, their shepherd bearing a certain resemblance to his own hard task-master, pass, bleating, over the bridge, from the Galata side, though the flerce creamcolored sheepdog that accompanies them snarls at him savagely, and shows his fangs. If these poor sheep ever cross over the bridge a second time, they will do so, probably, in the irresponsible form of Kébobs, threaded upon long wooded skewers, borne by a man who, like the vendor of sweetmeats, has a little three-legged table strapped to his back; for I fear they are all on their way to the shambles!

Talking of "shambles," here come a few survivors of those unfortunate men who were, recently, so mercilessly butchered in the streets of Péra in broad daylight—Armenian hammals, as they are called, hewers of wood and drawers of water, and, above all, bearers of the most stupendous weights. They are employed, at the different embassies and legations, as underlings in kitchen, laundry, and stables, and are, in general, as patient and long-suffering as most typical beasts of burden. At the time of the

mysterious attack upon the Ottoman Rank, when a band of desperadoes, said to have been educated Armenians from Odessa, after shooting down the Croat who acted as porter, and threatening to blow up the whole building, dictated their own terms to the dragoman of the Russian Embassy from its principal windows, any of these poor hammals that happened to be abroad in the streets, and who knew nothing of what was taking place, were brained, then and there, by the Turkish police, who appeared upon the scene, armed with bludgeons, simultaneously with the attack upon the bank. The order had gone forth to slay the Armenians, however peaceable and inoffensive they might be-an order that emanated mysteriously from nowhere, as was subsequently affirmed-and for forty-eight hours the Armenians were slain accordingly, with perfect sangfroid, and as deliberately and good-humoredly as it may be given to men to slay their neighbors. Then, from the same unacknowledged quarter, came an order that the massacre should cease, and the butchery came at once to an end, for the Turk is the very soul of obedience. Who sent these orders that were only too conscientiously obeyed? This is a great mystery, though some people pretended to have solved it. But then "some people" pretend to know everything! At any rate all the stories that were current about "religious fanaticism," "racial hatred," and the like, were merely pure inventions or ignorant suppositions.

"Your Government could be very severe upon rebels," one of our diplomatic colleagues remarked to me when we were discussing these events, alluding to punishments inflicted by the British Government upon the insurgent Sepoys during the Indian Mutiny, and upon our Fenian prisoners in later times. I explained to him, however, that, although those who were con-

victed of treason were very properly subjected to certain penalties, it was not our custom to massacre, indiscriminately, all those who were of the same nationality as the offending persons; that our peaceable Indian subjects had been allowed to remain in peace, and that unoffending Irishmen were not beaten to death in the streets of London, or butchered in their own homes, just because they happened to be Irish.

One of the Armenians, who is now crossing the bridge, is carrying a grand pianoforte upon his back. This is no unusual sight, as they are nearly always men of herculean strength. But mere thews and muscle would have availed them but little had they resisted the Turkish authorities. Seeing that they were unarmed and foredoomed, resistance would only have prolonged their agonies. Perhaps, if this scrap of history should ever repeat itself, a day may dawn when it will not be so easy to find, in Constantinople, men who can each carry a grand piano upon their shoulders without assistance.

A string of pack-horses come next, bearing stones, slung in baskets upon each side of their peaked wooden packsaddles, goaded on by rough-looking men wearing the fez and a miscellaneous assortment of many-colored tatters. who, I have been told, are Persians. Certainly they do not display any of that consideration for their beasts that I had been led to expect from the Turks, though this "consideration" often assumes rather too negative a form. A Turk dislikes taking the life of any creature (except man, upon occasion), but he too often appears to be absolutely indifferent to the sufferings of the animals he spares. These poor pack-horses, whether owned by Turk or Persian, are turned out to die in the chill mountain valleys when they are too utterly worn out to have either an hour's work, or a kick, left

in them. By a refinement of cruelty, or of carelessness, perhaps, the wooden pack, with all its galling thongs and fastenings, is left strapped to their emaciated carcases to the last, and it is indeed a piteous sight to behold these unfortunate creatures, halt, lame, and very often stone-blind, hobbling about awaiting the end, and endeavoring to prolong their miserable existences by cropping the scanty herbage with their long teeth. I remember, one afternoon, when on my way back from the Austrian Embassy, which was then situated at Buyukdere, coming upon one of these melancholy objects, "the very spectre of a steed," lying in his death agony, almost in the centre of the great valley of the mighty plane trees, where Godfrey de Bouillon is said to have encamped, with his Crusaders, in the old time. 1 As he lay there, dying, he might have been a white rag flung down upon the sward to dry, so lean was he, or the semblance of a horse, cut out of paper, but for the cruel pack, "a world too wide," which peaked up from his almost fleshless ribs. Some twenty or thirty pariah dogs sat round him in a circle, biding their time, all in the same position, and each one wearing the same figure de circonstance, suggestive of regretful sympathy. They are said never to start upon their meal until the breath is actually out of the poor exhausted body. Next day, when I happened to pass the same way, I saw only his white skeleton. His bones had not taken long to pick, and he could scarcely have satisfied even one of that hungry multitude.

A lady in a pink shot-silk dress and white yashmak comes along next, coquettishly veiled up to her languishing black eyes, the gossamer adding to the attractiveness of features that might perhaps have been a little heavy without it. She is attended by a hideous old negress in black satin, carrying a scarlet parasol. A lady of Stamboul. evidently, on her way to do a little shopping in Péra. It is odd that the Turks, who so jealously seclude the ladies of their families when at home. should so often allow them to take their walks abroad accompanied only by a female slave, who might, not impossibly, be accessible to the overtures of an aspiring admirer, and, above all. when they are disguised in a dress which might fulfil all the requirements of a domino. These little shopping expeditions, however, must so pleasantly relieve the monotony of harem life that one can only rejoice to think that these poor ladies are, apparently, so frequently permitted to indulge in them.

A band of Lazahs—dwellers, when at home, upon the Asiatic coast of the Black Sea—come hurrying along next. Tall, lithe, handsome men, though of somewhat feroclous aspect, dressed in picturesque costume, their sashes and waist-belts stuck full of all manner of murderous weapons. I had a good opportunity once of studying the features of some of these Lazahs at close quarters—rather too close, some people might consider, perhaps!

I had driven, one hot afternoon, from Therapia to the Forest of Belgrade, intending to sketch the house in the adjacent village which was said to have been occupied by Lady Mary Wortley Montagu during the summer of 1717 (O.S.) when she was, like myself, the wife of the British Ambassador. was a long, low building, constructed of wood like the other houses in the village, but distinguished from them by its superior size, and by some rather nice carving over the doorway. Whoever had once lived there, it was fast falling to decay, and I saw that if I wanted to sketch it, it must be now or never. Here is Lady Mary's description of her surroundings, in a letter addressed to Pope, dated "Belgrade Village, the 17th June, 1717."

The heats of Constantinople [she writes] have driven me to this place, which perfectly answers the description of the Elysian Fields. I am in the middle of a wood, consisting chiefly of fruit-trees, watered by a vast number of fountains, famous for the excellency of their water, and divided into many shady walks upon short grass, that seems to me artificial, but, I am assured, is the pure work of nature.

I have never yet visited "the Elysian Fields," except those of Paris, which certainly bear no resemblance whatever to the Belgrade village, or forest, of to-day. There is no sign, now, of anything that could be described as "artificial." The mighty forest is lonely and untended-I did not see any signs of "fruit trees"-and, save for what remains of the village, Nature reigns pure and undefiled. The village, indeed, has now become altogether a thing of the past. Upon arriving at the site of it, only a week from the time of my first visit, I found that it had been completely razed to the ground by a decree of the Sultan, who, in a fit of sanitary zeal, had ordered the destruction of all human habitations situated within a certain radius of the great water reservoirs, dreading contamination at a time when an outbreak of cholera was apprehended. A little girl-too young to have as yet assumed the yashmak, and, therefore, under the age of nine, and who stood, weeping, by the ruins of what had evidently been her home, and fondling in her arms a captive hoopoe-was the only human creature that I could discover. So, after consoling her with a few piastres, I wandered into the welcome shade of the forest, having requested Mr. McKay (the highly respected coachman of the British Embassy) and "Big Ibrahim" (the gigantic Montenegrin cavass who always ac-

companied me, until his enormous weight, combined with the rough Turkish roads, ended by breaking the springs of nearly all our carriages) to await me at the deserted village.

After pursuing a narrow forest track for about half a mile, I came upon a dreary swamp, looking like what might have been the bed of a half-dried-up A heron was standing among lake. the tall reeds, and an enormous plane tree, uprooted, and fallen from the bank apparently long ago, lay sprawling across it, like the blackened skeleton of some primæval giant, with mighty arms uplifted towards heaven as though appealing for mercy. Thinking that I should like a souvenir of this weird and desolate spot, I established myself upon my camp stool, and began a sketch, but had not made much progress with it before the heron rose, flapping its great wings, and a party of these Lazahs, some ten or twelve of them, appeared upon the scene, They seemed to spring up suddenly out of the morass, where I fancy they may have been fishing, and came swinging along, jumping and clambering over every obstacle that came in their way, and laughing and talking merrily. It struck me at once that they seemed to be rather too cheerful and undignified for Turks, but I had . no notion what manner of men they were; so, although I confess I was somewhat alarmed at their very cutthroat appearance, as it is not very easy to beat a hasty retreat when one is seated upon a camp stool in a marsh, with water-bottle and paint-box upon one's knees, I stood, or rather "sat," my ground, and they came up with me in less than a minute. Hoping to conciliate, I bade them good evening in Turkish-a language I was then studying. They returned the compliment by interesting themselves in my drawing, pressing round me upon every side, near enough for me to become aware

that their luncheon had consisted principally of garlic. Then they sélamed, and continued their way at a brisk trot, so that our meeting was of the most friendly description. Later on, I passed them upon my road home.

"Who are all those men?" I asked of the highly respected coachman of the British Embassy.

"They are Lazahs, living upon the shores of the Black Sea," he answered.

"How do they get their living?" I inquired, knowing that he was never at a loss for a reply.

"Chiefly by thievery and murder." returned Mr. McKay, in the soft voice and with the quiet smile that were habitual to him. As far as I was concerned, however, the Lazahs proved themselves to be very sheep in wolves' clothing.

A detachment of the Hamadiéh Cavalry now comes jingling and clattering over the bridge from the Stamboul side. Fine men, and fine horsemen, though of a fierce-looking barbaric type. These men are Kurds, originally half-brigands, who were in the habit of swooping down from their mountain fastnesses in order to rob and murder the peaceful inhabitants of the Armenian villages. The Sultan, having failed in subjugating them by other means, conceived the brilliant idea of turning them into regiments of irregular cavalry, the members of which (like my friends the Lazahs) soon acquired a very evil reputation. I can remember how the hearts of most of the residents in Péra sank within them. when some hundreds of these ruffians arrived at Constantinople, fresh from the massacres in Asia Minor, and what blood-curdling tales were told of spoils looted from Christian churches and convents; rings hacked off, with the fingers still hanging to them, &c., &c., which they were supposed to have taken to the curiosity shops, wrapped up in gory handker- stood by itself in these pages, I should

chiefs, and sold for a mere song. Possibly, upon their arrival, they may have been sated with blood (as the young ladies in our pastrycooks' shops are said, sometimes, to be with jam tarts) or, possibly, what is even more likely, these stories may have been mere fabrications. Be this as it may, the fears of the Pérotes proved unfounded, and the Hamadiéh Irregular Cavalry conducted themselves in the most exemplary manner during its sojourn in our midst.

More Turkish soldiers, and foreign tourists, and sailors, with Jews and Gentiles, and priests and nuns of various denominations, follow one another in bewildering succession. The carriage of the Sheikh-ul-Islam, it may be, conveying him and his private secretary, a tall negro; or those of the Bulgarian Exarch, or of the Armenian Patriarch; and if the Armenian Patriarch should happen to be Monsignor Ismirlian (now languishing in exile at Jerusalem, a martyr to his own honesty and conscientiousness), his face, or as much as can be seen of it under his peaked black hood, is certainly one to be remembered. Then green- or whiteturbaned mullahs; arabas, containing more Turkish ladies, accompanied by round-faced beady-eyed children, in bright-colored wadded cotton garments -wadded even in summer-the stream of foot-passengers, and of those who journey by araba, cart, or buffalowagon, seems never to cease for a single moment. Here, too, may be seen, passing and repassing, on their way to the Sublime Porte, the carriages of the ambassadors and ministers of the foreign Powers, whose representatives, with the exception of the Persian ambassador, all live upon the Péra side of the water. This mention of our Persian colleague reminds me of an incident which occurred during our stay in the Turkish capital, which, if it had have called "The story of the mistaken premonition," by which I should have intended to convey that a premonition, or a presentiment (one may call it what one will), had somehow become associated with the wrong person, just as a letter might be directed to, and deposited at, a wrong address. Here is the preliminary part of my anecdote:

Once upon a time, whilst we were living at the British Embassy, a wealthy Turkish gentleman from the environs of Péra went over the Galata Bridge in his brougham and pair to dine with some friends in Stamboul. Now it seems that the great iron clamps and girders which intersect the bridge, and which so jolt and rattle whenever one passes over them, indicate certain sections which, at stated times, can be somehow swung asunder, in order that the taller ships, which cannot go under the piers, may pass out of the inner harbor, on their way to the Marmora or the Black Sea, and that, after these divisions have been opened, they are wont to be carefully closed again, so that the safety of the general public may not be endangered. But, on the night upon which this wealthy Turk drove back from dining with his friends at Stamboul, the middle portion of the bridge had, by some unaccountable mischance, been left open. It was very late, and the night was dark and stormy; the toll-keeper was half asleep, and the coachman wholly drunk (so ran one of the many stories that were circulated after the event, showing that the said coachman must, almost certainly, have been a Christian "of sorts," the Turks of the lower and middle classes being invariably sober). There was another version. according to which the occupant of the brougham was drunk, the coachman half asleep, and the toll-keeper (the sole survivor, according to this "variant," and able thus to tell his own story) alert and sober, and eager to avert any

possible catastrophe by shouting and clutching hold of the sleepy coachman, who, nevertheless, obeyed the orders of his drunken master, and drove on.

Down, down, down, they went, right in the middle of the Golden Horn, just where its waters are deepest, and there, I conclude, they remain to the present day, or what is left of them, for the bodies had not been recovered when I left Constantinople, and the Turks, whatever may be their other faults, are never fussy, or in a hurry. Alluding to this tragedy, soon after its occurrence, to our friend and colleague the French Ambassador, who now so ably represents the French Republic at the Court of St. James's: "There will be only one night in this year," said he, "when any of the members of the corps diplomatique may be exposed to a similar danger; the night upon which we are all to be invited to dine with our colleague the Persian Ambassador. in order to celebrate the Jubilee of his Majesty the Shah" (a speech which sufficiently indicates the date of the occurrence).

Then, around this poor victim of mischance, sitting in his brougham at the bottom of the Golden Horn, to serve as food for the fishes, rumor and legend began to weave and entwine themselves, as they always did in that fertile land of romance. It was whispered that the poor Turkish gentleman was not, in reality, the victim of mischance at all, but of what was known by the name of "Palace intrigue." That he had been one of those appointed to investigate the conduct of the military during the recent massacres in Asia Minor, and that his report, in spite of the confidence thus gracidusly reposed in him, had been anything but satisfactory, and that the party that was opposed to Reform had, consequently, deemed it necessary to silence his voice for ever, so that garbled versions of current events should not be circulated

abroad, to the prejudice of truth and justice. That the toll-keeper was not really the toll-keeper, but an emissary of this same party, posted there to see that the bridge was opened at the appropriate moment, and that he was sewn up in a sack immediately afterwards and cast into the sea, at Seraglio Point, so that he might tell no tales. and that the whole circumstance, as a matter of fact, far from being an accident, was merely a preconcerted plan, successfully carried out. Thus spoke the voice of rumor-of calumny probably-but to such voices all those who dwell in Constantinople soon learn to become well accustomed and casehardened.

We were quite at an epoch of projected Jubilees, for just about this same time there arrived from Teheran a Persian "Ambassador-Extraordinary" on his way to England, sent thither by the late Shah to make arrangements connected with his Majesty's representation at the "Diamond Jubilee" of Queen Victoria, which was due the following year. He was a charming man, speaking English fluently (indeed, I believe he had been partly educated in England), and a banquet was forthwith organized, in his honor, at the British Embassy. He sat upon my right hand at this dinner (the "normal," or un-Extraordinary Ambassador having ceded him the pas), and presented me with a very pretty turquoise ring as a souvenir of the occasion, which I put on the third finger of my left hand. Then, the Ambassador who was not abnormal (I hardly like to call him "common or garden," being, as he was, our very good friend and colleague) made me a request. It had occurred to him that, after his impending Jubilee banquet, at which the guests were to be all of the male sex, he might appropriately give an evening party, to which the wives and daughters of the corps diplomatique should likewise be invited; but the ladies of his family had always lived secluded lives, according to Persian custom, and could not. even upon so auspicious an occasion. depart from their usual habits. Would I do him the honor of receiving his after-dinner guests, and would I be at the Persian Embassy "over the water" punctually at half-past nine o'clock, upon the night appointed for celebrating the Jubilee of his Majesty the Shah? The three Ambassadresses who took precedence of me were unavailable, just then, through absence and illhealth, and I was, therefore, though only for the time being, doyenne of the corps diplomatique, in which the order of precedence is regulated by the date of official appointment, without reference to the nationality or private rank of individuals. Of course, this request was not one that I could refuse, and I at once consented to do as I was asked. As soon as I had time for reflection, however, I bitterly repented my decision. The idea took possession of me that some sudden catastrophe would occur which would prevent us from arriving at our destination. It seemed to take the form of a warning voice, whispering for ever in my ear, "You will never reach the Persian Embassy, do what you will. There will be a surprise and a catastrophe of some sort; a very sudden catastrophe, resulting in a sudden death, which you cannot avert." This was the gist of the warning as correctly as I can set it down. To be quite honest, I had no presentiment that the Persian Jubilee would never take place; my feeling was that I should never assist at it myself on account of some unexpected tragedy, and my mind at once reverted to the unfortunate Turkish gentleman at the bottom of the Golden Horn.

For, truth to tell, there was every reason to suppose that the British Ambassador was not, just then, in the

very best of odors with this same party that was so obstinately opposed to Reform. It had been his painful duty to reveal to the Sultan the disagreeable impression produced upon the Government and the people of England by the recent Armenian massacres, and knowing possibly more of the dessous des cartes than did certain amateur politicians who meddled with the matter at home, he had spoken with characteristic British frankness. Then, again, Saïd Pasha, the ex-Grand Vizier, commonly known as kùchuk (or little) Said. to distinguish him from that very jolly old gentleman, "Saïd the Kurd" (at that time Minister of Foreign Affairs), listening, it may be, to some such legends and rumors as those that had gathered about the poor corpse in its brougham and pair, and imagining himself to be in danger of assassination, had recently placed himself under the protection of the British flag, and had taken sanctuary, with his young son Ali, at the Embassy, and the Ambassador had steadfastly refused to deliver him up to the Palace officials that were continually arriving, at all hours of the day and night, with the object of inducing him to do so, and although Imperial spies surrounded the house in a cordon, and remained there till we came to know all their faces by

Anyhow, I took it into my head, with no more adequate reason than I have explained, my nerves being, possibly, shattered by massacres, earthquakes, and what not, that this might not, perhaps, be an altogether inconvenient moment to swing open the middle of the Galata Bridge, just as worthy Mr. Mc-Kay was about to dash over it in his accustomed fashion, and then to throw the blame upon the toll-keeper, and to sew him up in a weighted sack, and cast him into the Marmora, as was said to have been done upon the last occasion when the same sort of "acci-

dent" had occurred. These disturbing thoughts, which increased as the days went by, caused me to look forward with much apprehension to the night upon which the Ambassadors of the Great Powers, together with the Ministers and diplomatic agents representing the lesser ones, were engaged to dine with our Persian colleague over the water.

The poor old Shah's Jubilee party never came off, as most of the readers of this Review will be aware. Before we had time to make ready to drive over the Galata Bridge, there came an official communication from the Persian Embassy: "My August Sovereign is deceased," the message ran, for it is not considered in good taste to make use of the verb "to assassinate" at Constantinople in any of its tenses. Shah himself, I have since learnt upon good authority, had also received his warning. As he quitted the Palace at Teheran, upon the day that was destined to be his last, he sneezed violently three times-a certain sign, according to Eastern notions, of impending misfortune. The courtiers who accompanied his Majesty implored him to treat it accordingly and to return. whatever may have been his failings, he was no coward, and, laughing at this friendly advice, he went fearlessly on to his doom.

I had beheld the late Shah but twice, and only once had had the honor of speaking with him. This was upon the occasion of a garden party given during his last visit to London by Prince Malcom Khan (at that time Persian Minister) at his house in Holland Park. When I was presented, his Majesty graciously held towards me a short, thick, wax-colored hand, ornamented with an enormous ring, and having what is termed "a murderer's thumb" (out of which I feel sure that our poor persecuted palmists of to-day could have made something highly interest-

ing), and asked me whether I had ever read the poems of Hafiz. I had no idea, however, that this brief and conventional handshake would have sufficed to establish a sympathetic affinity, or that the chord thus lightly touched would have gone on reverberating through the succeeding years with the result I have described. Somebody has since suggested that perhaps the ring, given to me by the abnormal Ambassador, might once have belonged to his royal master, and that thus some kind of mysterious rapport might have been established, or else that it might have been endowed with occult properties, said to be peculiar to some Persian turquoises, and that this may have accounted for my sensations. Be this how it may, it would seem that premonitions, like babies, are occasionally changed at nurse, and that one can no more have implicit confidence in them than one can in dreams. Perhaps some member of the Society for Psychical Research may be able to throw light upon this, matter.

There was one person (or personage, rather), who, during the whole time of our residence in Constantinople, never once went over the Galata Bridge either on foot or on horseback, or even in a bomb-proof carriage, unless he did so when shod with slippers that rendered him invisible, like the prince in the fairy-tale, and that was the mighty Padishah himself; the august Sovereign who holds life and death even in the hollow of his hand.

Once, in every year, upon the occasion of the Festival of the Hirka-i-Sharif, or "mantle of the Prophet" (15th Ramazân), when the sacred mantle and other holy relics which are preserved in the Serai are exposed to view, it is incumbent upon the Sultan to visit Stamboul, and it is generally given out in the Levant Herald, and elsewhere, that his Majesty will proceed by way of the Galata Bridge. When the day

appointed for the ceremony arrives, the route is lined with eager spectators. Regiments, in gala uniforms, are drawn up with their bands, all ready to strike up the Turkish National Anthem. School children, of all the different religious denominations and nationalities that flourish at Constantinople-Turkish, Greek, Hebrew, Armenian. even the little pork-fed orphans of the worthy Sisters of St. Jacob, await the procession upon either side of the road, bearing baskets, containing flowers. wherewith to bestrew the path of his Imperial Majesty, and with the hymns all learnt by heart which they have been instructed to sing upon his approach. The very road itself, for the first and only occasion in the year, has been rolled and mended, and even the rattling and jolting girders of the Galata Bridge have been plugged and bolstered up with hay and wadding, cunningly concealed with sand. for all this, the Commander of the Faithful fails to make his appearance. and the little black broughams of the ladies of the Yildez harem-from which one can just catch a glimpse of sparkling eyes and snowy yashmaks-pass over the floral offerings that were intended for their Imperial master.

At the very last moment the Sultan has decided to go by a different route, either walking down through his garden at Yildez to his private pier and embarking there, or else at the Palace of Dolmabaghcheh, and then slipping quietly across the Golden Horn in his steam-launch. The same impromptu programme is followed upon the homeward way. One thing only is certain, that his Imperial Majesty will never proceed by the road that has been previously designated to his loyal subjects. His loyal subjects do not like to to be cheated out of their pageants, and so there are those amongst them who pretend to see in this unwillingness to face the public the evidences of personal timidity. It is whispered that the Imperial plans are changed thus at the eleventh hour from fear of the assassin's bomb, and that the Palace spies endeavor to encourage these apprehensions for their own private ends.

A certain absence of robustness in the Sultan's appearance may have encouraged the supposition that he possesses a nervous and sensitive temperament, but some remarks which his Majesty addressed to me one evening at Yildez, upon the occasion of our attendance at *Iftar*, led me to believe that he is not apprehensive in the ordinary sense of the word.

Iftar is the name of a meal which is partaken of among Mohammedans at sunset during Ramazan, and which represents the first breaking of the daily fast, which has lasted since sunrise. It commences, usually, in a Turkish household, with olives, sardines, salad (what we should term hors-d'œuvre), and sweetmeats, served in small silver dishes or saucers, and later on develops into a meal of a more substantial kind. No Christian can, properly speaking, be said to partake of Iftar at all, as the term is suggestive of a previous fast in which he has had no part. To all who are not Mohammedans, Iftar is simply a dinner or supper party, without any religious signifi-

When it takes place at the Palace, it is accompanied by none of the gorgeous accessories which are indispensable upon more formal occasions. The Court officials do not wear gala uniforms, the full force of the electric light is not turned on, and the guests are expected to array themselves neatly and respectably, but not in their very best. Upon their arrival at Yildez, punctually at sunset, they are received and welcomed by sundry high Imperial functionaries, who, for the time being, have laid aside the starry constellations that are wont to glitter upon their

manly breasts. After waiting about for some time, and passing from one small apartment to another (with the exception of the State dining-room, the apartments at Yildez Kiosk are all of modest dimensions), they are eventually conducted to the room in which Iftar is about to be served.

When foreigners are invited to Iftar the Sultan does not preside at the meal in the character of host, his place being taken by one of the high Court officials, but yet are the guests prone to sit upon the very edges of their chairs, to crumble their bread, and to converse in subdued voices, as they glance, with mingled feelings of awe and respect, in the direction of a large black and gold screen, which only partly conceals an open door leading to an inner apartment. For within this apartment-or so it is whispered and suspected, though nobody can be quite sure as to what does or does not happen at Yildez-his Imperial Majesty the Sultan, "holding life and death even in the hollow of his hand," is partaking of his own Iftar (the real Iftar, following upon a conscientious fast), after his own fashion and in solitary grandeur. No wonder therefore that the guests in the adjoining room are wont to sit upon the very edges of their chairs, to crumble their bread, and to converse in subdued voices as they glance towards the open door that is only partly concealed by the large black and gold screen!

After Iftar, upon the last occasion upon which we were invited to partake of it at the Palace, the high Court official again conducted us through narrow tortuous ways until we suddenly found ourselves opposite the embrasure of a small door, in which the Sultan was standing. Having made our obeisance, his Imperial Majesty offered me his arm, and proceeded, with a much longer stride and firmer step than might have been expected, considering

his somewhat chétif and fragile appearance, to a small wooden circus, connected with the Palace, where an entertainment, consisting of dancing dogs and performing ponies, had been provided for our amusement. This was just after the unpleasant visitation known as "the Great Earthquake," when part of the old bazaar and several other buildings were levelled with the ground, and when all sorts of stories were current, descriptive of the blind terror with which the event was supposed to have inspired the Sultan.

But, upon this night of Iftar, no traces of any such terror were visible. His Imperial Majesty appeared to be in the most genial and affable of moods, conversing agreeably, and laughing heartily at the antics of the performing dogs and ponies, which, he informed me, had been trained under his own personal supervision. By-andby a clock in the adjacent corridor struck the hour, to the accompaniment of musical chimes. The Sultan, who had placed me upon his right hand. took out his watch, shook it, held it to his ear, and then, after calling my attention to it with an arch smile, said something, in a low voice, to the Master of the Ceremonies (poor Munir Pasha, now dead and gone, and, even then, suffering terribly from asthma), who was acting as dragoman. (It is more than suspected that the Sultan is acquainted with other languages besides his own, but it is his custom to converse with his guests in Turkish, making use of an interpreter when necessary, who translates the Imperial utterances into French. At first, this method reminds one irresistibly of the famous conversation, through an interpreter, described in Kinglake's Eothen, but, by-and-by, one becomes quite used to it-compliments and all-and the seeming difficulties entirely disappear. When the subject matter is of importance, it is usual for each Ambassador, or Minister, to be accompanied by his own dragoman, which is supposed to guarantee the absolute correctness of the translation.)

"His Imperial Majesty desires me to inform your Excellency," said Munir Pasha, pressing the lower portion of his chest with both hands in token of inexpressible respect, "that this is the precise moment at which a renowned prophet has predicted the total destruction of the city of Constantinople by an earthquake, together with every one of its inhabitants, including the August Sovereign himself."

While this speech was being delivered, the Sultan followed it with eyes that positively twinkled. Nothing could have been less suggestive of the abject terror to which, we had heard it affirmed, he was still a prey. As in duty bound, I replied somewhat as follows:

"Your Excellency will greatly oblige me by making known to his Imperial Majesty how sincerely touched I am at the proof he has deigned to give me of his confidence by informing me of this interesting circumstance, and pray have the goodness to add that, in my humble opinion, the natural alarm which such convulsions of Nature are wont to produce is largely due to the fact that they are of such uncertain occurrence, no man having as yet been able to predict correctly when they are likely to take place." This answer (rather a typical one of its kind, I flatter myself) was duly translated to the "August Sovereign," who again smiled and muttered something in a low voice.

"His Imperial Majesty desires me to say," wheezed poor Munir Pasha, "that your Excellency is, as ever, entirely in the right. No man is able to predict, to a certainty, when an earthquake is likely to occur, as the time appointed for all such visitations is absolutely in the hands of God."

I have since been reminded, by one who is not an unqualified admirer of either his Imperial Majesty or of all his works, and who has, moreover, no very high opinion of his personal courage, that when these pious sentiments were uttered, we were seated in a temporary building, constructed chiefly of laths and plaster, supplemented by sailcloth, which, even if the soothsayer's prognostications had come to pass, might have descended upon our heads like a house of cards, without doing us any very serious injury; and it was suggested to me that this place might possibly have been selected at that particular moment as a precau-The Nineteenth Century and After.

tionary measure (to which, even assuming that this insinuation had any truth in it, I could scarcely have taken exception, seeing that I had been thus graciously accommodated with a seat in what may have been meant for an ark of safety). As a matter of fact, however, the Sultan appeared to be quite in a mood to snap his fingers at the earthquake, and the man who can snap his fingers at an earthquake, in spite of its divine origin, must be possessed of a certain amount of courage. even if, for private reasons of his own, he may not often care to ride or drive over the Galata Bridge.

Mary Montgomerie Currie.

AT BAY.

My child is mine.

Blood of my blood, flesh of my flesh is he,
Rocked on my breast and nurtured at my knee,
Fed with sweet thoughts ere ever he drew breath,
Wrested in battle through the gates of death.
With passionate patience is my treasure hoarded,
And all my pain with priceless joy rewarded.

My child is mine.

Nay, but a thousand thousand powers of ill
Dispute him with me: lurking wolflike still
In every covert of the ambushed years
Disease and danger dog him: foes and fears
Bestride his path, with menace flerce and stormy.
Help me, O God! these are too mighty for me!

My child is mine.

But pomp and glitter of the garish world
May wean him hence; while, tenderly unfurled
Like a spring leaf, his delicate spotless days
Open in blinding sunlight. And the blaze
Of blue and blossom, scents and songs at riot,
May woo him from my wardenship of quiet.

My child is mine.

Yet all his gray forefathers of the past Challenge the dear possession: they o'ercast His soul's clear purity with dregs and lees
Of vile unknown ancestral impulses:
And viewless hands, from shadowy regions groping,
With dim negation frustrate all my hoping.

My child is mine.

By what black fate, what ultimate doom accurs'd, Shall be that radiant certainty revers'd?

Though hell should thrust its fiery gulfs between, Though all the heaven of heavens should intervene, Bound with a bond not God Himself will sever, The babe I bore is mine for ever and ever.

My child is mine.

The Spectator.

May Byron.

DEMOCRACY AND REACTION.*

I.

Writers on democracy are legion. Of this great host of its critics in every tongue, England, the first nursery of modern democracy, contributes, I think, the fewest. In our own generation Mill stands at the head of them. His treatise on "Representative Government" argued the case against the good despot, while his little books on Liberty (1859) and the Subjection of Women (1869) carried the argument for emancipation to its extreme point. Intellectual reaction at once set in with Fitzjames Stephen's strenuous polemic against Mill's doctrine in his book on Liberty, Equality, and Fraternity. It was continued in a cooler vein by Bagehot's shrewd humor and the subtlety of W. R. Greg. Maine next threw a frigid douche upon popular government, but he was too much of a bureaucrat alike by temperament and training, and the field of his observation of democracy was far too narrow, for his four essays on popular government to do anything like justice to

* "Democracy and Reaction." By L. T. Hobhouse. (London: Fisher Unwin, 1904.)

their writer's powerful and capacious mind. Lecky's volumes on Democracy and Liberty have not generally been counted among that distinguished man's successful performances, and they will hardly rank above high-class pamphleteering. T. H. Green, the potent and stimulating Balliol tutor, a quarter of a century ago, rejected most of Mill's philosophy, yet he is justly described as Mill's "true successor in the line of political thinkers." The list might be extended, but it is not a long one. The steadiness of our institutions in their working accounts for the comparatively scanty speculative talk about them-comparatively with France, for instance.

Critics of democracy naturally approach it from many different directions, varying with the incidents and requirements of the time. They test it by its bearings, often almost accidental, upon some ruling social controversy or achievement of the hour; war, taxation, the rights of property, our duties to the poor, the rights of clerical congregations, or whatever else may show the good or evil of popular supremacy and its machinery. In fact,

discussion about democracy is apt to be idle, unfruitful, and certainly tiresome, unless it is connected with some live contemporary issue. Anybody can see how irresistible an impulse was given to political thinking of all kinds by the Boer war, of which not long ago people heard so much, and of which they now appear to wish to hear so little. This conflict, far more momentous in its secret issues than the rough hurry of the day allows most people to perceive, exhibited English democracy is so unexpected a light, raised so many questions both of politics and ethics, that it is no wonder if a large library shelf is crowded with printed reflections on Christianity and war, Christianity and patriotism, Machiavellism and morality, the psychology of jingoism, the empire and the nation, and all the rest of this literature of ferment. The little volume on which I now take leave to offer a few observations is one of the best products, as it is one of the most suggestive.1

Is it, asks the author, that "the democratic State, the special creation of the modern world, and the pivot of the humanitarian movement, has itself become an obstruction to progress? Does popular government necessarily entail a blunting of moral sensibility, a cheapening of national ideals, a wider scope for canting rhetoric and poor sophistry, as a cover for the realities of brutal wealth? Have the ideals of the reforming era lost their efficacy. and is it clear that its watchwords cease to move?" To put Mr. Hobhouse's questions rather differently, is it not true that even the old idols of theatre and market-place have fallen from their pedestals; that an epidemic of unbelief has run through our Western world-unbelief in institutions.

in principles, churches, parliaments, books, divinities, worst of all and at the root of all, in man himself? Such epidemics are familiar in the annals of mankind; they are part of the terrible manichæism of human history, the everlasting struggle between the principles of good and evil; they make us think of Luther's comparison of our race to the drunken man on horseback—you no sooner prop him on one side than he sways heavily to the other. What is the share of democracy in bringing the rider to this precarious and unedifying case?

Mr. Hobhouse does not refer to Mill's memorable chapter on true and false democracy,2 though we may be sure that he is well acquainted with it. Advocating one scheme or another for the representation of minorities in parliament, Mill set out some of the difficulties of democracy, as we in England know democracy. The natural tendency of representative government. he said, as of modern civilization generally, is towards collective mediocrity. This is a pregnant sentence: does time confirm it? Without arrogance I may perhaps assume that the Frenchman or the American would join the Englishman, and, comparing to-day with glowing epochs of illumination in the past, would admit that, outside of natural science and the material arts, our lamp just now burns low. Mill gives his reason for this somewhat depressing anticipation. Human improvement, he says, is a product of many factors, and no form of power includes them all. The condition of progress in a community is the existence of a conflict between the strongest power in it and some rival power; between spiritual and temporal; or military and industrial; or king and subjects; or ortho-

¹ Mr. J. A. "Hobson's "Imperialism" (1992) is another elaborate and well-compacted study, full of diligently collected material and coherent argument. He anticipates

some of the ground now taken in "Democracy and Reaction," and puts his case with both breadth and precision.

^{2&}quot; Representative Government," chap. vii.

doxy and reformation. When victory puts an end to the strife, without another conflict succeeding, stagnation follows. The ascendency of numbers is "less unjust and, on the whole, less mischievous than many others, but the very same kind of dangers attends it, and even more certainly. For," continues Mill, "when the government is in the hands of One or a Few, the Many are always existent as a rival power, that may not be strong enough even to control the other, but whose opinion and sentiment are a moral, and even a social, support to all who, either from conviction or contrariety of interest, are opposed to any of the tendencies of the ruling authority. When the democracy is supreme, there is no One or Few strong enough for dissentient opinion and injured or menaced interests to lean upon."

Schemes such as Mill favored for protecting minorities in those systems of representative government which, like most modern writers, except M. Pobedonosteff, he counted one of the supreme human inventions, have not as yet attracted much support. But communities so unlike as Belgium and Australia are cases where deadlock among balanced forces may draw attention in Mill's direction. Here it is enough to note that a writer whose plea for liberty contributed so powerful an impulse to democracy as it was accepted in England a generation back, never taught us that democracy was the only guarantee we needed for steady and unbroken progress. He knew too much history.

II.

Whatever else democracy may be, it means in our modern age government by public opinion—the public opinion of a majority armed with a political or social supremacy by the electoral vote, from whatever social classes and strata

that majority may be made up. Up to 1832, as all the books truly tell us, political power in England belonged to the territorial aristocracy, not insensible to public opinion outside in framing or administering laws, but still exercising decisive influence on its own account. In 1832 the currents became too strong for the old channels; opinion in the middle class became the guide, though patricians and landed men long kept Cabinets to themselves. to say nothing of their monopoly of the benches at quarter sessions and the posts in army, navy, and diplomacy; they maintained the corn law for fourteen years; they had their own way in foreign policy, in spite of the Manchester men-the best representatives that the middle class has ever had. Finally, everybody knows how in 1867 and 1885 our Demos, though not yet quite full grown to the stature of universal suffrage, was installed upon his throne, like his kinsman Demos in America, France, Germany. The effect has been indeed a surprise to those who made sure that, if you only gave the workman votes and secured a sufficiently cheap press, England might be trusted to beat her swords into ploughshares and her spears into pruninghooks. Reformers overlooked the truth set out by Tocqueville when he said, "Nations are like men; they are still prouder of what flatters their passions, than of what serves their interests." The idea of empire intervened, partly because the circumstances of empire changed.

Between 1885 and 1900 Great Britain added between three and four million square miles and a population little short of sixty millions to her imperial dominion; and the expenditure on the two war services has risen since 1875 from twenty-four to over seventy millions of pounds. It is not, however, on this well-worn and irresponsive string that Mr. Hobbouse seeks to harp.

The change in national temper, or the emergence of unexpected forces and drifts in public opinion-that is what he tries to probe. Everybody who is capable of taking an interest in the deeper and more general aspect of our national affairs will be glad, first, that such a discussion has been raised (and it was in fact inevitable, unless the English faculty of political reflection had come to a full stop); next, that a deliberately reasoned contribution to it comes from a writer who has proved himself in other fields of thought³ so acute, competent, and well prepared and vigorous as Mr. Hobhouse.

His description of the sources and processes by which public opinion in our time is formed is not lacking in trenchancy, and it might give a pleasure, certainly not intended by its author, to the cynical persons, either at home here or across the Channel, who regard popular government as elaborate dupery, were it not for the author's fervid perception and enforcement of the prime truth that under every political or social question lies the moral question.

The very figure of John Bull as the typical Englishman seems out of date and inapplicable as an expression for the average Briton of the present day. The easy-going, stout, well-meaning, rather dull old gentleman, a little proud if the truth be told of his very dulness, and apt to conceive of it as an incident in that fundamental honesty which distinguished him from his sharp-witted neighbors, the well-nourished territorial magnate, slow-going. hard to move, but implacable when once stirred, narrow perhaps, but fundamentally just and honorable in all his dealings, is no fit representative of the average public opinion of our day. For that, we have ourselves coined a new abstraction: "the man-in-thestreet," or "the man-on-the-top-of-abus," is now the typical representative of public opinion, and the man-in-thestreet means the man who is hurrying from his home to his office or to a place of amusement. He has just got the last news-sheet from his neighbor; he has not waited to test or sift it; he may have heard three contradictory reports, or seen two lying posters on his way up the street, but he has an expression of opinion ready on his lips, which is none the less confident because all the grounds on which it is founded may be swept away by the next report that he hears. The man-inthe-street is the man in a hurry; the man who has not time to think, and will not take the trouble to do so if he has the time. He is the faithful reflex of the popular sheet and the shouting newsboy. . . . The man-inthe-street is familiar with everything. Nothing is new to him; it is his business not to be surprised. He knows already all about any appeal that you can make to the better side of him, and he has long ago chopped it up in his mill of small talk and catch phrases and reduced it to such a meaningless patter that the words which must be used have acquired trivial and lowering associations.

All this is vigorous satire, and it is true. Still, to check a despondent fit, let us remember Sir Robert Peel's words a dozen years before the first Reform Bill: "The tone of Englandof that great compound of folly, weakness, prejudice, wrong feeling, right feeling, obstinacy, and newspaper paragraphs, which is called public opinion."4 If this was a true story in 1820 are we so much lower to-day? And before being too sharp upon our democracy to-day, let us not forget, for instance. Burke's complaint of the Demos of his day: "It is but too true," he cries, "that there are many whose whole scheme of freedom is made up of pride, perverseness, and insolence. They feel themselves in a state of thraldom; they imagine that their souls are cooped and cabined in, unless they have some man, or some body of men.

^{*} E. g. " Mind in Evolution" (1901).

^{4&}quot; Croker Papers," i, 170.

dependent on their mercy. The desire of having some one below them descends to those who are the very lowest of all; and a Protestant cobbler, debased by his poverty, but exalted by his share of the ruling Church, feels a pride in knowing it is by his generosity alone that the peer, whose footman's instep he measures, is able to keep his chaplain from a gaol. disposition is the true source of the passion in which many men in very humble life have taken to the American war. Our subjects in America; our Colonies: our dependents. This lust of party power is the liberty they hunger and thirst for: and this Siren song of ambition has charmed ears that we would have thought were never organized to that kind of music."

Let us at once say that Mr. Hobhouse is as far removed as possible from the temper of the mere croaker, the frondeur, the mauvais coucheur, or-to use the ugliest term in all political slangthe mugwump. No dilettante, his mind throws itself into energetic contact with circumstances. He faces the unwelcome facts of his time without any of the weak spirit of disenchantment, and with a manful determination that, though the world has not in recent years gone his way, the battle is by no means over. The whole strain of his argument is positive and constructive, and though he has the high merit of being an idealist, he has long been a close, exact, and direct observer of working politics from day to day. Just as for the purposes of mental philosophy he investigated with scientific rigor the ways of the animals at the public gardens in Manchester, so in politics he rigorously attends to his details, while we are sensible all the time of the pulse of a strong humanity, and of that warm faith in social progress which is, in other words, faith in men, hope for men, and charity for men.

An accomplished Frenchman, now

dead, one of the ten thousand critics of democracy, illustrates by a story of his friend Bersot his conviction that human nature will remain to the end pretty like itself, apart from forms of government or measures of social economy. One day Bersot, writing upon Arcachon and its pleasures. wound up his article by saying, "As for happiness, why there, as everywhere else, you must yourself bring it with you." So Scherer himself, in like spirit, could not but believe that it is the same with institutions. They depend on what men bring with them. In a less discouraged spirit, or rather with no discouragement of spirit at all. Mr. Hobhouse still recognizes that selfgovernment is not in itself a solution of all political and social difficulties. "It is at best," he says, "an instrument with which men who hold by the ideal of social justice and human progress can work, but when those ideals grow cold; it may, like other instruments, be turned to base uses." The fundamental reform for which the times call is rather a reconsideration of the ends for which all civilized government exists; in a word, the return to a saner measure of social values. "We shall be under no illusion," he concludes, "about democracy. The golden radiance of its morning hopes has long since faded into the light of common day. Yet, that dry light of noon serves best for those whose task it is to carry on the work of the world."

III.

The starting-point of Mr. Hobhouse's book is the practical operation of Imperialism and the imperial idea within the last fifteen or twenty years. He misses, by inadvertence I suppose, the historic origin of this far-reaching movement of the day, for he does not remind us that it first began in the rejection of Home Rule in 1886. Union-

ists, in resisting the new Liberal policy for Ireland, were naturally forced to make their appeal to all the feelings and opinions bound up with concentraimperial Parliament, imperial unity, and determined mastery in the hands of "the predominant partner." Conservative reaction had set in during the general election of the previous year, and had shown itself in the unconcealed schism between the two wings of the Liberal party (for the Liberal party is always by its essence What precipitated this a coalition). reaction in the direction of Imperialism was the proposal of Home Rule, and the arguments and temper in which its antagonists found their most effective resort. Perplexities in Egypt, that weighed quite as heavily on Lord Salisbury as on Mr. Gladstone, strengthened the same impression.

To the "imperial idea" itself and the light in which it was offered to honorable, patriotic, and liberal-minded men, Mr. Hobhouse does full justice.

"See," the Imperialist would say, "this marvellous work of our race, the vast inheritance of the generations which we hold in trust for our descendants-in mere size the greatest Empire of history, in variety of interest, in the extraordinary complexity of its composition far surpassing all political societies that the world has ever known. Consider how it extends the laws of peace over prairie and jungle, mountain and steppe, subarctic ice and torrid forest; how it maintains order and administers justice with equal success for the brand-new mining community, for the ancient civilization of the Ganges or the Nile, or for the primitive clan of the Indian hills. Is not this," urges the enthusiast, "among the greatest of human achievements, this unparalleled adaptability in arts of conquest and of government? And yet this is not the best. What is an infinitely greater matter is that where the British flag goes, go British freedom, British justice, an absolutely incorruptible Civil Service, a scrupulous

impartiality as between religion and races, an enthusiasm for the spread of that individual liberty and local selfgovernment which have made England herself so great! . . . You talk perhaps of humanity-a vague, abstract idea. But do you not see that any genuine humanitarianism must be the result of a gradual broadening of those very sympathies which first make a man a good patriot? There was a time when love for England, as a whole, was too wide a conception, and men were Mercians or Northumbrians, but not Englishmen. Just as it was an advance when the love for England superseded this narrow provincialism, so is it an advance when Imperialism supersedes your narrow Little Englandism. You may say that Empire means force, aggression, conquest. That may have been so in the past, but we live in an age when Empire is free, tolerant, and unaggressive, and if we still acquire territory, we acquire it not for ourselves but for civilization. You may object to the method by which the Empire was built up, but here it is in being-a great fact, a tremendous responsibility."

"Taken at its face value," as Mr. Hobhouse says, no wonder that this appeal proved seductive and almost irresistible. This parenthesis, by the way, on Little Englandism deserves a word or two of quotation. Is there nothing to be proud of in Little England, in her history, her literature, her thought, the great men that she has borne for the world, her struggle for political and religious freedom? "The question might be raised whether the British Empire as a whole has any history to show which compares with the history of Little England; any science, any literature, any art; in fine, any great collective military achievement, worthy to be weighed in the scale against the resistance of Little England to Philip the Second or to Napoleon. A great Imperialist once coupled the name of Little England with the policy of surrender. It was a libel. Little England never surrendered. On the contrary, she three times encountered Powers which aspired to the mastery of the world, and three times overthrew them. The genuine pride of patriotism is surely lost when littleness of geographical extent can be construed into a term of reproach. It is the other face of the same vulgarity which boasts that a single British colony is greater than the land that produced Kant and Goethe."

Anybody in whom the boisterous intoxication of the last ten years has not extinguished all capacity of candid thought, whatever way his conclusions upon particular policies and events within that time may lean, will find this salutary vein well worth pondering. One remark occurs to me upon these glorious things in passing. They were done when England was under the sway either of monarch, or aristocracy, or both. Of a democracy originally British, the most astonishing and triumphant achievement so far has been the persevering absorption and incorporation across the Atlantic of a ceaseless torrent of heterogeneous elements from every point of the compass into one united, stable, industrious, and pacific State with eighty millions of population, combining the centralized concert of a federal system with local independence, and uniting collective energy with the encouragement of individual freedom. How does this stand in comparison with the Roman Empire, or Roman Church, or the Byzantine Empire, or Russia, or Charles the Great, or Napoleon? That, however, is digression, Meanwhile, Mr. Hobhouse, with energy of perception and without vehemence or excess of language, contrasts the plausible promises of Imperialism with its performance, and here South Africa obviously supplies the leading case. He gives no undue proportion to the Boer War, and does not allow it to draw him too far from

either the central line or the rationalist temper of his speculation. Still, the annexation, through military conquest. of two small States, lawfully inhabited. possessed, and governed by white men. is so striking an example of reaction-I am not sure whether against democracy or not, but-against our ruling maxims for a century past, that it was impossible for him not to dwell upon it. I will not take the reader over the still heated embers of this dire conflagration, but a few sentences from Mr. Hobhouse's summary of the immense self-dupery of the Boer War are essential in any account of his book and its subject. Little by little, he says, it has become clearer that "the new Imperialism stood, not for a widened and ennobled sense of national responsibility, but for a hard assertion of racial supremacy and material force." unprejudiced observer was compelled to recognize that, "judged by actual performance, it meant perpetual warfare, battles which, where black or yellow men were concerned, became sheer massacres, campaigns which, where a resolute white race stood in the way, involved desolation unspeakable, the destruction of political and personal freedom, and the erection on their ruins of an un-English type of overpaid and incompetent officialdom, the cold-shouldering of the British immigrant, and the recrudescence of servile labor. Finally comparing the battle-cry with the actual result of victory, he began to ask himself whether the enterprises on which his fellow-countrymen freely spent their blood were such as minister to the glory of the Empire and the good of humanity, or rather to the vanity of a self-confident satrap and the lucre of a capitalist."

By Imperialism he understood a free informal union with the Colonies, combined with a conscientious but tolerant government of tropical dependencies. This was in essence the conception of

the Empire bequeathed by the older generation of Liberals, and precisely the antithesis of present-day Imperialism, the operative principle of which is the forcible establishment and maintenance of racial ascendency. "The trap laid for Liberals in particular consisted in this-that they were asked to give in their adhesion to Imperialism as representing admiration for an Empire which more and more has been shaped upon Liberal lines. Having given their assent, they were insensibly led on to the other meaning of Imperialism-a meaning in which, for all practical purposes, these principles are set aside. And there was a medium to facilitate the change. For if the Empire was so liberally formed, so free, tolerant, and unaggressive, could we have too much of it? Should we not extend its blessing to those that sit in darkness? And so, by a seductive blending of the old Adam of national vanity with the new spirit of humanitarian zeal men are led on to the destruction of their own principles."

The story is an old one. In these high matters let us be sure that nothing is as new as people think. Names are new. Light catches aspects heretofore unobserved. Temperature rises and falls. Yet the elements of the cardinal controversies of human society are few, and they are curiously fixed. Though the ages use ideas differently, the rival ideas themselves hold on in their pre-appointed courses. Democracy is not new, and reaction against it is no newer. The questions so vigorously and acutely sketched by Mr. Hobhouse are old friends with fresh faces and changed apparel. To go no further back than the sixteenth century, we may trace in the most important of the deep controversies raised by him a familiar outline of the conflict between the principles of Machiavelli on the one hand, and on the other the principles of Bodin and all the vast crowd

of anti-Machiavellian writers. Terms alter; the issue is corstant—force against right; reason of State against maxims of ethics; policy against justice and truth; serpent against dove, fox against lion; narrow and local expediency against the broad and the eternal; private morals the test or not the test of public morals.

To these general aspects of his subject Mr. Hobhouse comes speedily enough, and even the reader who dislikes his expostulations against satraps and alien capitalists soon finds himself in the smooth waters of a grave and varied inquiry into the causes of a farreaching change in the temper of the times. It is, as Mr. Hobhouse says, by no means peculiar to our own country or to the sphere of politics. It is common to the civilized world, and penetrates every department of life and thought. If it is to be summed up in a word, he tells us, "we should call it a reaction against humanitarianism." Humanitarianism is now dismissed as sentimentality. "Its efforts at internationalism have yielded to a revival of national exclusiveness, seen in the growth of armaments, the revival or aggravation of Protectionism, growth of anti-alien legislation. doctrine of democratic rights has been replaced by the demand for efficiency, or by the unadorned gospel of blood and iron. Indeed, the bare conception of right in public matters has lost its force, and given place to political 'necessity' and 'reasons of State.' Hence human wrongs and human sufferings do not move us as they did."

For this sorry transformation he finds four causes. First, he names "decay in vivid and profound religious beliefs." This decay was in process a generation ago, but its effects at that time were set off by the rise of a humanitarian feeling which, partly in alliance with the recognized Churches, and partly outside them, took in a measure

the place of the old convictions, supplying a stimulus and a guidance to effort, and yielding a basis for a serious and rational public life. These promises have not come true. A good-natured scepticism has risen up, "not only about the other world, but also about the deeper problems and higher interests of this."

It is a pity that the author has done no more than touch a question that so deserves or needs to be definitely explored. The relations of Christianity and the Churches to democracy, empire, war, have never been of profounder interest or moment than they are to-day. We might have expected the gospel that teaches man to love his neighbor as himself, and to regard all men as equally the sons of one divine Father-such a gospel might have been expected to weaken pride of race, and all the passions that are bound up with imperial conquest. Yet that has hardly been so. As for democracy, it has often been pointed out for how many centuries the Christian empire was not less despotic than the pagan. Why, again, should decay in dogmatic beliefs about the supernatural lead to a decline in the influence of Christian ethics? All this poignant theme, however, goes far too deep even to approach in a parenthetic paragraph.

If the decay of beliefs is the first element in the reaction against humanitarianism, the second is the diffusion in thought of a stream of German idealism which has swelled the current of retrogression from "the plain human rationalistic way of looking at life and its problems." This point is excellently described. According to the idealistic doctrines to which Mr. Hobhouse imputes such mischief, "every institution and every belief is for it alike a manifestation of a spiritual principle, and thus for everything there is an inner and more spiritual interpretation.

Indeed, it is scarcely too much to say that the effect of idealism on the world in general has been mainly to sap intellectual and moral sincerity, to excuse men in their consciences for professing beliefs which in the meaning ordinarily attached to them they do not hold, to soften the edges of all hard contrasts between right and wrong, truth and falsity, to throw a gloss over stupidity, and prejudice, and caste, and tradition, to weaken the bases of reason, and disincline men to the searching analysis of their habitual ways of thinking.

A third and still more effectual element of reaction has been the career of Prince Bismarck, itself a concrete exemplification of the Hegelian State. "The prestige of so great an apparent success naturally compelled imitation, and to the achievements of Bismarck, as we are dealing with the forces that have moulded opinion in our own day, we must add the whole series of trials in which the event has apparently favored the methods of blood and iron, and discredited the cause of liberty and justice."

After all, however, and this is Mr. Hobhouse's fourth cause, "by far the most potent intellectual support of the reaction has been neither the idealistic philosophy nor the impression made by contemporary events, but the belief that physical science had given its verdict in favor-for it came to this-of violence and against social justice." In other words, Darwinism. "But those who have applied Darwin's theories to the science of society have not as a rule troubled themselves to understand Darwin any more than the science of society. What has filtered through into the social and political thought of the time has been the belief that the time-honored doctrine 'Might is Right' has a scientific foundation in the laws of biology. Progress comes about through a conflict in which the

fittest survives. It must, therefore, be unwise in the long run—however urgent it seems for the sake of the present generation—to interfere with the struggle. We must not sympathize with the beaten and the weak, lest we be tempted to preserve them. The justice, the mercy, the chivalry, which would induce the conqueror to forbear from enjoying the full fruits of his victory, must be looked on with suspicion. It is better to smite the Amalekite hip and thigh, and let the conquering race replenish the earth."

The exploration of this, the deepest reaching of all the causes of reaction against the humanitarian movement of better times, is the most substantial of the contributions of this volume to social thinking. It is a rigorous and scientific argument against the biological view that since men are animals, the laws regulating human development must be identical with those we observe in the breeding of shorthorns or of fan-tail pigeons; or that the pigeon-fancier has more to teach us of the conditions of human progress than Gibbon or Mommsen.

The question on other sides of it was raised in early days after the speculations of Darwin and Wallace saw the light, by W. R. Greg, in a well-known paper on the Non-Survival of the Fittest and Civilization antagonistic to the Law of Natural Selection, and it has been abundantly treated by a host of eminent men, notably in Huxley's lecture on Evolution and Ethics, and in a crowd of writings since. I will not try to follow Mr. Hobbouse through his two chapters on Evolution and Sociol-

fittest survives. It must, therefore, be ogy and the Useful and the Right; in unwise in the long run—however urthis place the statement of his conclugent it seems for the sake of the pression will be enough:

A just conception of evolution does not support the view that the struggle for existence is the condition of progress. It lends no sanction to the prevailing worship of force. On the contrary, it supplies a broad justification for the ethical conception of progress as consisting essentially in the evolution of mind, that is to say, in the unfolding of an order of ideas by which life is stimulated and guided. It has been the misfortune of our time that attention has been diverted from this ethical, or if the expression be preferred spiritual, order in which the essentials of progress lie to the biological conditions that affect man only as the human animal. A clearer view of the meaning of evolution should restore the mind to its rightful place, and thus justify the reformers who insisted on the application of ethical principles to political affairs, as against the materialists for whom the ethical consciousness is a bye-product of forces to which in any conflict it must necessarily give precedence. . . . Amid all differences and conflicts one idea is common to the modern democratic movement, whether it takes the shape of revolution or reform, of Liberalism or Socialism. The political order must conform to the ethical ideal of what is just. The State must be founded on Right. . . . The biological view of evolution opposes this ideal as unscientific and in the end self-defeating. It is for this reason that the biological teaching is so profoundly reactionary and lends itself so handily to the popular cynicism of the day. A truer view of evolution, on the other hand, exhibits the attempt to remodel society by a reasoned conception of social justice as precisely the movement required at the present stage of the growth of John Morley.

^{5&}quot; Enigmas of Life." (Eighteenth edition, 1901.)

The Nineteenth Century and After. (To be concluded.)

THE LUNGS OF THE HOUSE OF COMMONS.

That the House of Commons is the chamber with the best acoustical properties among its compeers is indisputa-Personally, with an experience exceeding that of most members, I hold it to be also the best ventilated. This is a controversial point governed by idiosyncrasies. It is an old story, going back to a date beyond thirty years, how John Bright and Acton Smee Ayrton, sitting side by side on the Treasury Bench during the last years of Mr. Gladstone's great administration born in 1868, used to squabble over the temperature. While one declared it was intolerably cold, the other protested it was insufferable by reason of heat.

Dr. Percy, then in charge of the ventilating machinery, was the recipient of angry letters from both statesmen. Mr. Ayrton was at the time First Commissioner of Works, and spent an appreciable portion of a useful, strenuous life in prowling round, closing up the air openings of the chamber. "Mr. Ayrton was very susceptible to draughts," Mr. Prim, Resident Clerk of the Works in the Ventilation Department of the Houses of Parliament, subsequently Resident Engineer, confided to the Select Committee meeting in 1892. Mr. Bright yearned for fresh air, from whatsoever quarter it came. Thus it came to pass that as they sat together watching the decadence of Mr. Gladstone's once vigorous Ministry, a coolness literally sprang up between the President of the Board of Trade and the First Commissioner of Works.

It is this difference in the temperature of statesmen and less important mortals that harries the life of those responsible for the ventilation of the House of Commons. What is one

man's fresh air is another man's dangerous draught leading to rheumatism and other direful consequences. normal temperature of the House of Commons is, with infinite care and at considerable cost to the nation, kept at the level of 62°. That is the ideal temperature for healthy human beings. But so devotional is the care with which the priceless health and comfort of members are watched over that varying circumstance leads to altered temperature. The thermometer consulted every hour, the result being recorded in a book that will never be published. The inquiry is no mere slap-dash performance. There is nothing in the nature of casual inquiry taken haphazard. An able-bodied man passes a useful life in perambulating the chamber and its precincts, thermometer in hand, testing the temperature. No member coming upon him by chance guesses his kindly errand. He may be seen flitting behind the Speaker's chair at one end of the House, presently skirting the chair of the Serjeant-at-Arms at the other, anxiously watching the thermometer and entering the record. Thence his parade leads him to the division lobbies, the retiringrooms, the outer lobbies, and all the places where members congregate. His report is, hour by hour, carried to the Clerk of the Works, who, with a speed and decision unknown in Committee of Supply, deals accordingly with the ventilating apparatus.

I have mentioned the fact that the normal temperature aimed at is 62°. Having made profound study of human nature, the experts in charge of the ventilation of the House recognize that with a temperature 80° in the shade outside, members entering a chamber where it stood at 62° would feel it

Accordingly, in such exceptional circumstances, the temperature is nicely graduated, going up to 65°, or higher. The same infinite care watches over an all-night sitting. This divertissement taking place on a sultry summer night, a temperature of 62° is a luxury. With the dawn of early morning healthy animal nature grows chilly. The temperature in the chamber is, accordingly, delicately doctored until, as far as possible, the anxious expert raises it to about the average of the blood heat of an Irish or Welsh member.

In no other legislative assembly in the world is equal solicitude in the important matter of ventilation shown for the comfort of members. The extreme Radical will feel some satisfaction in knowing that it is not extended to the House of Lords. The difference between the atmosphere of the two chambers is strikingly disclosed on the rare occasions when the House of Lords sits late, carrying on debate in a crowded House. Ventilation is attempted by the ordinary process of opening windows. How ineffective this proves by comparison with the scientific, elaborate mechanism controlling ventilation in the House of Commons is brought home to the member leaving his own House to sit for awhile in the gallery overlooking the Peers. The air of cities contains an average of four volumes of carbonic acid per 10,000. In an ordinary room the ventilation is regarded as satisfactory as long as the proportion of carbonic acid in the atmosphere does not exceed six volumes per 10,000. The House of Commons, with some 350 people breathing its atmosphere, rarely exceeds four volumes, equivalent to breathing the fresh air outside. This simple matter of fact is a triumphant vindication of the success of its ventilation.

Doctors are agreed on the point that supply of fresh air should reach the

proportions of fifty cubic feet per minute per head. That ideal is habitually exceeded in the House of Commons. Members who, like the oldest clubman, must grumble about something, complain that while the air is abundant it lacks freshness, inducing a feeling of lassitude. In fairness to the painstaking staff of the ventilation department it should be pointed out that this incontestable condition of constant attendance upon Parliamentary debate is due not to lack of freshness in the air supplied, but to the prodigious length of some speeches. As an incentive to a state of physical and mental lassitude, an hour's discourse from Mr. Caldwell is equal to an increment of carbonic acid in the atmosphere of one volume per 10,000.

Two years ago careful experiments were carried out with desire to ascertain to what extent bacteria frequented the House. The results were curiouson the whole satisfactory. For reasons which members familiar with its occupants may determine, the worst quarter of the House was, oddly enough, the bench immediately behind that on which his Majesty's Ministers sit. As the result of ten experiments made with infinite care, it was demonstrated that here bacteria revelled in proportion of 87 per cent., while the corresponding bench on the opposite side revealed the presence of only 65 per cent. of undesirable visitors. On the back bench on the Government side the record ran as low as 57 per cent. Compared, as was done in the Select Committee's Report, with such representative congregations of innocents as gather in the town schools of Aberdeen and Dundee, where mechanical ventilation is in use, this incursion of microbes in the quarter whence Mr. Gibson Bowles cross-examines Ministers was exceptionally high. The organisms were different in form. Happily, in no case was discovery made of the presence of any recognized as the cause of specific infectious diseases in man.

The unique privileges of members of the House of Commons in respect of ventilation are secured by elaborate and costly machinery. When, after the destruction of the Houses of Parliament by fire in 1834, the structure was rebuilt, special attention was devoted to the subject. Dr. Reid, the highest authority of the day, was entrusted with the care of this department. The process adopted by him was chiefly based on the use of gigantic fans, which drove fresh air into the chamber. While the supply of fresh air was an article of faith, the presence of a constant draught was a matter of fact. In this initial stage the main principle underlying the ventilation of the chamber of to-day was adopted. Air was driven into the chamber through the grating of the floor. Members, ever complaining, protested, with some reason, that while by this primitive process they were chilled in winter and scorched in summer, such air as was provided was served up strongly impregnated with pounded grit and road metal. A tradition lingers round this epoch, showing how a long-suffering member secretly provided himself with a piece of paper freshly gummed. This, in the presence of sympathetic witnesses, he attached to one of the seats. On examination at the close of the sitting the paper was found to be covered with particles of fine dust projected by the ventilating apparatus. This was conclusive, and Dr. Reid and his system disappeared from Westminster.

After brief interval he was succeeded by Sir Goldsworthy Gurney, who, doing away with the primitive fans, adopted the principle familiar in collieries of a furnace at the base of an upcast. Dr. Percy, following Sir Goldsworthy in care of the ventilating apparatus, maintained this

principle, and with one or two improvements it is in practice at this day.

The machinery is subterraneous, There are many more vaults betwixt the foundations of the Houses of Parliament and the floor of the House of Commons than are dreamt of in the philosophy of hon. members. Under the Octagon Hall of the Palace of Westminster lurks a vault whence the supply of air for the debating chamber is drawn. Through doors and windows the balmy breeze of the Thames is drawn into this chamber.

This arrangement is accountable for an episode, threatening at the outset, farcical in the conclusion, that marked the reign of Mr. David Plunket (now Lord Rathmore) at the Board of Works. One sultry summer night, the House being exceptionally crowded in anticipation of a division, his private room was stormed by a mob of alarmed and angry members. Even as the door opened to admit them the First Commissioner was conscious of a pestilential smell. This evidence confirmed their complaint that the corridors, the reading-room, the dining-room, and, to a modified extent, the lobby were permeated by malodor. The conclusion Something had gone was obvious. wrong with the drains, and the health of honorable and right hon. members was in instant peril.

Mr. Plunket hastily summoned to consultation the chief engineers and the heads of his staff. Hurried examination was made of the sanitary apparatus, without detecting a flaw. Even as the anxious work went forward the plague abated. The normal condition of the sedulously purified atmosphere was steadily, with increased rapidity, reasserting itself. The harried First Commissioner, going on to the Terrace with intent to cool his heated brow, came upon the heart of the mystery. Just passing the end of the Terrace, slowly making its way

with the tide up the river, was a stately barge, with high deckload of fresh manure meant for riverside gar-Drifting at slow pace by the Terrace of the House of Commons, the evening breeze, blowing off the heap, had filled the ventilating bins with delectable air. Hence the scare.

The progress of the indraw is intercepted by a broad expanse of falling water, through which the air must pass, leaving behind it possible particles of undesirable dust. Inside the chamber are a couple of shafts worked by a large pair of wheels, which drive the air into what looks like a colossal corn bin. This is a chamber eight feet high extending the full breadth of the vault, a distance of thirteen feet. Inside this bin is a movable close-fitting shutter, which travels backwards and forwards. As it is pushed forward the air in the bin, having no other means of escape, passes upward through a funnel into another chamber prepared for its reception. The closely fitting shutter advancing leaves a vacuum behind, into which the outer air comes rushing, in time to find itself driven upwards by return of the relentless shutter.

Thus through the long night, while tongues wag above, the almost silent shutter moves backward and forward. crushing the newly come air out of the bin, only to find that a fresh supply has entered on the other side, making constant discovery that if the bin is to be emptied there is yet another journey to make.

The air thus dexterously trapped breathes itself out from the upper bin into a gallery, along which it courses till it finds itself under the legislative chamber. Thirty feet above the lights of the House shine, twinkling through the close iron grating of the floor. It is so silent down there that one candistinctly hear the voice of the hon. member addressing the Chair. Climbing a series of steep iron ladders the explorer comes upon a succession of gratings on which stand blocks of ice. Coursing round these the ambient air cools itself before entering the House through the grating which serves as flooring, so cunningly hidden by twine matting that probably half the members of the House are not aware of its existence.

The blocks of ice are for summertime. In wintry weather the air is comfortably heated before it enters the chamber. When the fog lies low over London the outer air passes through layers of cotton wool six inches thick. The appearance of the cotton wool after a few hours fog is a painful object-lesson for citizens. There was a memorable occasion when the fog prevailed unintermittedly for forty-eight hours, with the result that the cotton wool was as black as the back of a chimney. I have groped my way down to the House through a dense fog, and, entering the legislative chamber, have found it absolutely free from mist, the atmosphere in normal condition. That is the ultimate triumph of the patient, cultured care that watches over the lungs of the House of Commons.

By this elaborate process does fresh air get into the legislative chamber in unbroken supply. How the vitiated atmosphere, occasionally tainted with strong language, escapes is a simpler process. By the marge of the ceiling are panels opening upon a space left between it and the roof. The air, rarefied by use, ascends as the sparks fly upward, escapes by these open panels, is conducted by flues to the basement, and delivered in a gallery ending in a shaft opening up in the clock tower, a height of 230 feet. On the basement a great fire brightly burns on open hearth. Drawing to it the inrushing air, it drives it up the shaft and so into the infinitude of spacious London.

Henry W. Lucy.

The Cornhill Magazine.

A PLEA FOR THE ABOLITION OF ALL LEARNING.

For many years a gross injustice has been done to the flower of our youth by the Universities, which, for the base purposes of pedantry and profit, have encouraged the study of such antiquated subjects as Greek, Latin and Mathematics. At the very age when a boy, alert and impressionable, might be learning how to write a paragraph, or how to buy and sell, the chief duties of self-respecting mankind, he is set down to acquire languages which are never used in commerce, or to make calculations which have nothing to do with day-book or ledger. However, at last the world is waking up to the folly of education, and there is a good hope that in a few years we shall see an end put once and for always to the ignorance and ineptitude of Oxford and Cambridge.

An excellent beginning has been made. Greek is as good as abolished. How it has survived so long passes my comprehension; but in a few months it will be consigned to limbo, with all its indecent alphas and omegas. There is not an argument to be brought forward in its defence. No one has yet been able to tell us why an honest British boy should waste his time in learning a barbarous language which does not even employ civilized letters, and which (I am told) has no words for "telephone" or "syndicate." It is true that Homer and Cicero wrote their works in it. But, after all, who are Homer and Cicero? For those, who, like Mr. Carnegie, must have culture at any price, there are Mr. Lewis Morris and Miss Marie Corelli; and, whatever faults the supercilious don may find in these writers, no honest man can deny them the possession of genius. Greek, then, is as good as gone, and Latin must follow it,-on this point let there be no mistake. One dead language is as bad as another; and I have been told by one who sincerely repents of the time which he wasted at school that. though Latin is only half as old as Greek, it is twice as ugly. The argument that the Holy Scriptures were written in Latin is not worth answering. Some years ago a Revised Version was published at vast expense, and with this to help us we have no need of the original. It is time, then, that Greek and Latin were buried as well as dead: for they have done no real practical good in the world, unless we count the sovereigns that they have put in the musty pockets of a few idle professors.

But if Greek and Latin are a useless encumbrance to the hustler, mathematics are no better, and they too must be struck out of what schoolmasters call the "curriculum." (Isn't it like schoolmasters to use Greek where plain Anglo-Saxon would do just as well?) I never heard of a boy whose salary was raised because he had wasted years, which might have been profitably spent in some honest business, on Euclid and Algebra. Euclid and Algebra, forsooth! Euclid, a childish picturebook, was written, I am told, by a Greek, which is quite enough to condemn it; and Algebra is the heathen name of some nigger in the East, who never saw the advantage of marking all goods in plain figures, and has made endless confusion with his a's and y's and z's. Then there is a book called "Conic Sections," which I saw an anæmic youth reading in the train the other day. What it is all about, I don't know; but I should have thought that nobody ever sees a cone nowadays except the man that sells a sugar-loaf. It is clear, therefore, that in this age of competition there is no room for mathematics. Our young men must be up and doing. They must keep a hand upon our old markets and find new ones; they must show the German and the American that old England is not yet played out. But they won't do that on Euclid and Algebra; and the poor fool who reads these pagan authors, when Germany threatens our commercial supremacy, reminds me of Alcibiades, who played the flute while Rome was burning.

Once upon a time I had high hopes of Science. When I was a boy I heard Tyndall preach-I mean lecture-and I felt a kind of pride when he compared himself and me to "streaks of morning cloud, melting into the azure of the past." I didn't understand what he meant, and his "streaks" turned my thoughts to bacon; but I was always told that there was money in science, and that atoms and protoplasms were going to make our fortunes. I know better now, and I verily believe that science is the worst of the lot. Where's the use of dissecting frogs, and cutting up the brains of pigeons, and looking for something in the air which you can't see, and grubbing for metals which you can't make into sovereigns? And that's not the worst that goes on at Oxford and Cambridge. Why, I am informed that there are grown men at both these Universities who spend their life in planting sweet-peas, not for table decoration, mind you-there might be some sense and profit in that -but merely to see what colors the flowers will take on. And they quarrel about the results, like so many stockjobbers or politicians, with a loudness and energy worthy a better cause. But we business-men have no use for such triflers, and though our men of science have done yeoman's service (that's a good phrase!) in attacking Greek, they must now come under the harrow of public opinion themselves.

It is with great regret that I record the misguided attempts made by the spurious friends of honest commerce to introduce what they are pleased to term "modern" studies into the Universities. These gentry advocate the learning of history and geography; they recommend French and German; and modestly suggest that a professorship of engineering is not ridiculous. Was ever more pestilent nonsense talked? History is of no service to anybody save to the novelist, a poor foolish creature, whose existence is just tolerable because he can send us to sleep after a hard day in the city. But why should the business-men, who are the backbone of the country, fill their heads with the silly gossip and adulterous intrigues of a hundred years ago. when commerce was in its infancy. and the splendid markets of to-day were still undiscovered? The case of geography is still worse. The age of Robinson Crusoe is past. Nobody has to find his way about the world now. The bulk of our business with America is conducted by correspondence, and if we have to cross the ocean, it is perfectly easy to buy a ticket, and the steamer knows the road. And why we should trouble to learn French and German, two foolish tongues, which are spelt one way and pronounced another, I do not know. A German clerk, who understands them both, may be hired for fifty pounds a year, and before'long they will both disappear before Esperanto. As to engineering, I will say no word but this: let the young man who would study it go into a workshop, and use his hands. There he will learn more in a week than a University will teach him in a year.

There remains one foolish subject, to which that great and good man Mr. Carnegie sometimes refers,—that is, literature. I am sorry to disagree, even for a moment, with the noblest of our captains of industry, but when the

King of Pittsburg talks about books I cannot follow him. It is all very well to read, write, and cipher, though many a fortune might be made with no more than a telephone and a tally-stick; and, even if you didn't care to read, the grandmotherly law steps in to compel you. But literature! Bah! Isn't the daily paper good enough for the plain man of business? Besides, it isn't at a university that literature is taught. The hard stones of Fleet Street are better than any college. I don't believe that a single one of our bright journalists, who were well described the other day in a halfpenny paper as "the Shakespeares of the twentieth century," has wasted a year at Oxford or Cambridge; and Mr. Carnegie, no doubt, has his tongue in his cheek when he distributes his free libraries.

The Universities, then, are doomed beyond hope or help; and I, for one, am glad of it. They are useless, as I have proved, and, thank God! they are bankrupt. Here they are cringing and fawning for subscriptions to the honest merchants, who are the pride of England; and the honest merchants, if they are wise, will button up their pockets. Some of us have thought that it might be advisable to give them a little money, on condition that we tell them what they should teach and how they should teach it. But it isn't good Nothing is worth teaching, enough. and I shall not be content until no single student wears the gown either in Oxford or in Cambridge. The only question that remains to be answered is, What shall we do with the colleges? I went to Oxford the other day with a cheap ticket, and I soon found an answer. With some pulling down and building up, most of the colleges can be converted into excellent warehouses and factories. And in my mind's eye I see the city, which for many years has been a nest of drones, crowded with industrious working men, all making money for me and other capitalists. A little capital—that's all that's wanted. The colleges can be bought cheap, and who knows but in twenty years poor, antiquated, old Oxford may wake up, and send calicoes and hardware to America, to our Colonies, and even to the remote islands of the Pacific? After all, if you want imagination, you must go to a business man; and one thing is certain, should my plan be carried out, we shall hear little more of dead languages, mathematics, and geography.

And with Oxford the rest of England too will wake up. Freed from the tyranny of schools and academies, our young men will be strenuous and energetic. They will take Mr. Carnegie's famous tip, and shun a salaried career. They will buy cheap, and sell dear; they will boss their boss, as soon as they have swept the office; and in the happy days when "the collegemade" man will exist only in a corner of Germany, England, happy England. will rule the commerce of the world as to-day she rules the waves. And when that age of gold comes, as come it must, it will bring with it true equality and fraternity. No man will be able to give himself airs because he has studied what Mr. Carnegie so eloquently calls "petty and insignificant skirmishes between savages." The true test of manhood will be, as it should be always, the power to make money and rig the market. And as all men will be equal in freedom from the knowledge of senseless things, so they will be bound together in the fraternal bonds of competition. There is as much good material in England as in America, and when Oxford and Cambridge are converted to neat manufacturing towns, when the sky, which looks down on these "seats of learning" (save the mark!) is changed from a foolish blue to a healthy, profitable black, we may even hope to rival Pittsburg itself.

And now nothing remains for me but gie's nearest librarian assures me that to find an appropriate nom de plume for my article, in which I flatter myself I have proved conclusively the absurdity of all learning. I had thought of "Ne plus ultra" and "Ne sutor." Not that I know what either of them means. God forbid! But Mr. Carne-Blackwood's Magazine.

both of these are a trifle hackneyed; and I readily accept his suggestion that I should reveal my business in the best Greek at his disposal. And so I sign myself, with the pleasing consciousness of a stern duty properly performed,

Mercator Anglicanus.

AT THE UNIVERSITY.

I am presuming, Cornelia, that Boybig Boy by this time-has passed through the three preliminary stages of education, and is now duly prepared to receive the final polish of University training. It is probable, and certainly desirable, that in the last year or so of his Public School career he will have been to a certain extent a ruler as well as a subject, the head of his House, or. at any rate, a person in authority in his House at Eton or elsewhere. For, if at the age of eighteen he has not arrived at a position of some responsibility, he will have missed an opportunity of usefulness, and must be written down as either unlucky, misunderstood, or incompetent. It may be that, like the Russian private soldier, he is a good individual fighter, but has been found to lack the power of organization or of taking the initiative. But in that case he must, I fear, be rather a poor creature, wanting in character, too apathetic or too frivolous to grasp his opportunities. For he will most certainly have had more chances of coming to the front and of making his mark than are offered to the patient and much-enduring Muscovite, and it is the aim and intention of our Public School education that the elder boys should take their part in the proper development of the system.

"As much authority as possible should be delegated to the upper boys," wrote a gentleman who had made a conscientious study of the duties of a House Master.

"Old habits, old practices, are handed down from generation to generation, and, above all, old feelings,"

So said Dr. Arnold in his sermons, and the habits, practices, and feelings are those of the boys themselves. The good name of a House directly stands or falls by the character of the upper boys in it rather than by that of the House Master, though the latter, both directly and indirectly, may have a good deal to say in the matter of the formation of the character of those who have worked their way towards the headship of the House under his supervision. Times have fortunately changed since Arnold pronounced that "Boys have learnt to regard themselves and their masters as opposites to one another, as having two distinct interests,-it being the master's object to lay on restrictions, and abridge their liberty; while it was their business, by all sorts of means,-combination amongst themselves, concealment, trick, open falsehood, or open disobedience,to baffle his watchfulness and escape his severity."

"Autres temps autres mœurs" is applicable to school-life as well as to state-craft. When Jenkins, shorn of his ear, seven years after the event "recommended his soul to God and his

cause to his country," the uncontrollable indignation of the public plunged our forefathers into war; but in a more enlightened generation the Dogger Bank incident is referred to arbitration. So, too, in school matters the "argumentum ad baculum," whereby Keate so promptly suppressed an incipient rebellion at Eton, is nowadays superseded by an appeal to common-sense-a quality in which, with all due respect to Aristotle, schoolboys are not wholly deficient. The modern House Master, if he is worth his salt, is careful to make friends of his upper boys, the real leaders of popular opinion, and after duly impressing upon them, by careful process of manipulation, his own views of what is right and wrong, seemly and unseemly, he leaves with all confidence in their hands the major part of the executive authority.

I prefer to imagine, then, Cornelia, that the youth in whom you are especially interested has been a person under authority in the last year of his school career, and has duly acted up to his responsibilities. From the day on which he bids farewell to his school life, his manhood may be pronounced to have begun, and with the assumption of the toga virilis-Anglice, the undergraduate's gown-he is emancipated from many wholesome restrictions, and to a far greater extent than before has to fend for himself. On this matter of manhood, by the way, I was forgetting that Winchester, Wellington, and probably some other schools, are rather "previous." It is not within my ken whether the word "Man" occurs in the Winchester book of "notions," but its absurdity as applied to a brat of thirteen is sufficiently absurd.

"Do you mind much, mother, if I ask a man to tea with us?" quoth a boy of the mature age of thirteen to his mother when she paid him a visit in his first term at Wellington. The

lady professed her contentment with the arrangement, but was agreeably surprised when the guest proved to be a child rather smaller than her son.

Now, for which sort of Man do you want to exchange your Boy, Cornelia. Oxonian or Cantab? From a geographical point of view Oxford and Cambridge are not very far apart, and so far as climate goes there is nothing to choose between them. Either town is apt to be damp, fog-bound, and. therefore, presumably unhealthy in spring and autumn. But the young men of England seem to thrive indifferently well both at the one and the other. It is highly probable, Cornelia. that at the outset of Boy's school career that old family doctor, on whose opinion you set such store, warned you against sending him into the valley of the Thames, and solemnly assured you that no living boy could thrive in such a locality. Curiously enough, some of the strongest men of my acquaintance plead guilty to having spent the major part of every year of their life, between the ages of nine and twenty-three, in the said valley of the Thames, and they certainly do not seem to have suffered from it.

However, I am ready to admit that perhaps one man in ten may find the climate of either Oxford or Cambridge a bit trying at times; but, as I said before, I doubt if there is a pin to choose between the two localities. If the low-lying parts of Oxford are more relaxing, per contra the higher parts of the same town are more invigorating than any parts of Cambridge.

Nor, again, is there any appreciable difference of class, character, or habits that separates the undergraduate of Oxford from the undergraduate of Cambridge. I have heard it asserted, though I am by no means prepared to vouch for the correctness of the assertion, that a certain indefinable something—this is vague enough in all con-

science-stamps the University man, and separates him from the man who has not resided at either University. Let this be as it may, at any rate I am prepared to guarantee that, apart from putting leading questions in cross-examination, no one shall be able to ascertain which of the twin brothers Antipholus hails from Oxford and which from Cambridge. They will both be found to be partial to striped flannel suitings, to have acquired the habit of talking learnedly on matters of which they know a mere smattering, and to be capable of drinking and apparently digesting a glass of beer at ten o'clock in the morning.

Life at either University is not always quite such plain sailing as it looks on the surface. If there are sundry and divers incentives to work, these are coupled with manifold temptations to idleness. Your son, Cornelia, must furthermore be prepared to encounter as a freshman new and hitherto unheard-of possibilities for spending money and running into debt, and to find ample scope for pretty nearly every form of senseless extravagance. It may happen that Newmarket does not lie quite so handy to the doors of Oxford as it does to those of Cambridge; but there are not wanting at either University "sporting" tradesmen, or professional bookmakers, who reap a golden harvest from those weak-minded undergraduates whose literary tastes do not extend beyond the "Sportsman," by laying so-called starting-prices, or something a good deal more than a shade under the market odds, in any and every race. In a good many of our country villages it is the habit, as you may know, Cornelia, of the local butcher and baker to get the name of every new-comer upon their books with all convenient speed. The poor are proverbially improvident, and, running into debt by insensible degrees, remain

to the end of the chapter at the mercy of the astute creditor, who, provided that he retains the debtor's custom, and from time to time gets something on account, is careful not to put on the screw too tightly. Bad debts and occasional midnight flittings are amply provided for by extortionate charges. Much the same sort of thing goes on at a University. There are many honest tradesmen both at Oxford and Cambridge; but there are also those who regard the easy-going undergraduate as a pigeon to be plucked, and leave no stone unturned to get his name upon their books. True, to a certain extent the Vice-Chancellor's Court protects the interests of the victim. But it is only in rare cases that the latter has the moral courage to accept the assistance of this institution, publicity of his indebtedness, as leading to other complications, being the one thing above all others that he wishes to avoid. It is much more probable that, like the country parson in the grip of a money-lender, he will attempt to stave off the immediate difficulty by paying a little on account, and trust to the chapter of accidents to pull him through at last. Possibly these things are better managed at Cambridge than at Oxford. For at Cambridge there is, I believe, at any rate a theory that the undergraduate's bills pass through his tutor's hands. There is a theory, too, at Oxford that certain notorious offenders are inhibited from supplying goods to undergraduates. But I am afraid that in practice methods of evasion are not hard to find. Far more difficult to discover is a middle path between the due preservation of the liberty of the subject and a hard-and-fast law that no money shall be recoverable from an undergraduate unless a terminal account has been rendered to the College authorities. To any outsider, who is not conversant with the innate conser-

vatism and suspicion of anything in the nature of a new departure which dog the course of our Universities, it may, seem well-nigh incomprehensible why co-operative stores, conducted on the same principles as the Army and Navy and the Civil Service Stores in London, are not directly run by either University. The poverty of the Universities and the extravagance of undergraduates-this, by the way, has within late years sensibly diminished-are things that have been dinned into our ears from time immemorial. But an obvious remedy for both the one and the other has never been seriously suggested. University stores, conducted on a cash or deposit account system, would do much to remove one of the stumbling-blocks that beset the way of the undergraduate, and at the same time to fill the coffers of the University. I am not losing sight of the fact that individual Colleges do on a small scale run stores for their own collegians, and I presume that they are not losers by the transaction. It stands to reason, surely, that a larger combination would produce more material results. If, on the one hand, it may be said that a University would be derogating from the dignity of its intention by partially resolving itself into a trading community, it may, on the other hand, be urged that an ounce of practice is worth a full pound of theory, and that it is vain work to teach the principles of political economy unless we occasionally employ them. I fear, however, Cornelia, that a remark made by the writer of "Musings without Method," apropos of Oxford, is almost equally applicable to Cambridge, and that either University is likely to remain "quixotic in her ideals and intolerant of change."

Talking of change, I do not suppose that you take a very deep interest in the question of the abolition or retention of Greek as a compulsory subject

at the Universities. I have neither time nor inclination to discuss the question in this paper, but I may remark that if the argument of a Cambridge Don, who shall be nameless, in favor of the retention of Greek has been correctly reported, it is at once original and far-fetched: "The ordinary modern chemist cannot express himself in intelligent language because he has not even a modicum of Greek." I will own that personally I regard it as a matter of small importance whether my chemist "speaks with the tongues of men and of angels," or whether he is ignorant of the most elementary rules either of grammar or of rhetoric, provided always that he can be trusted to make up a prescription properly. A conversational chemist might become as great a nuisance as a conversational barber.

On the subject, however, of an undergraduate's temptations, one word more, Cornelia, though I feel that I am by way of trespassing upon delicate ground. Not long ago I happened to read this statement in the "Spectator," a periodical which commonly speaks with a delicious assumption of superlority:—

"The vast majority of undergraduates are healthily impervious to the attractions of their fellow-undergraduates' sisters and cousins, though nearly all the writers on University life would give you the opposite impression."

May I suggest that it is only on rare occasions that an undergraduate during term-time is favored with even a glimpse of his fellow-undergraduate's sister or cousin, and that, except perhaps at Commemoration Balls or the May races, opportunities for flirtation are few and far between. Indeed it would be safe to hazard a conjecture that "the vast majority of undergraduates," except on those abnormal occasions,—a majority perhaps not even then,—seldom get the opportunity of

even passing the time of day to a fellow-undergraduate's female relations from one end of the term to the other. The "Spectator's" conclusion, then, to my mind, is based on an entirely false hypothesis—the hypothesis, that is, of recurrent opportunities for love-making.

It so happens that I could put my finger upon a good many graduates who eventually married sisters of men who at some time were their fellowundergraduates. But marriage while a young man is still in statu pupillari is to be regarded as a future contingency, and Hartley Coleridge's observation that "there must always be something defective in the moral feelings of a man, or very unfortunate in his circumstances, who makes the Public his confidant," is certainly applicable to love-making. I am afraid it will be found that a minority of weakkneed undergraduates are not quite so impervious to the attractions of the fair sex as might be desirable, and that the pictures presented in "Tom Brown at Oxford" and "Frank Fairlegh" of flirtations with pretty barmaids, shop-girls, &c., are more or less true to life. The University authorities put down this sort of thing with a strong hand, but the most vigilant and conscientious of proctors is not wholly infallible. These hard-worked officials might sleep more soundly if the undergraduate held the same views on the subject of English beauty as did a once notorious Eastern potentate. "So you only let your ugly women be seen!" remarked Shere Ali to Lord Mayo at Umballah.

I have put these things before you, Cornella, not with the view of deterring you from sending your son to a University, but rather that you may see how necessary it is that he should proceed on this final stage of his edution duly equipped with a sensible amount of self-control. This he will

have if he has profited by the training of a Public School, and has in the later months of his stay there taken his due part in regulating and controlling the impulses of his school-fellows. At the University, though still nominally under tutors and governors, he will be practically master of most of his own time, living therefore in an atmosphere of greater freedom than either the young soldier, sailor, land agent, or city clerk. Roughly speaking, it amounts to this-a lad who has been what is called a "rotter" at school has at a University more abundant opportunity for continuing to be a "rotter" than would probably be granted to him if he went straight from school into any profession. A commanding-officer, whether colonel or post-captain or the head of a firm, is apt to give a short shrift to the ne'er-do-well. But Alma Mater in her dealings with her alumni illustrates the truth of the proverb about the horse and the water. For while she offers to the student an excellent quality of education, and holds out certain inducements to work, there is an absence of compulsion, a more conspicuous absence in the case of the clever "slacker," who finds himself capable of obtaining a pass or a lowclass degree without having to exert himself. It is true that some Colleges look after their undergraduates more sharply than others and even insist upon the fact that every student shall in one School or another be a candidate for Honors; but, as Mr. Wells remarks in his account of Oxford life, it is equally true that, "so far as his degree is concerned, a man need not have attended a single lecture." There is no doubt that the undergraduate, no longer as at school Smith or Brown, but even to the Head of his College Mr. Smith or Mr. Brown, resents almost as keenly as does the rustic the idea of "bein' druv'," and the successful Headmaster, theoretically the best possible Head of a College, has seldom been found to be so in practice.

"Capax imperii nisi imperasset" might be written of more than one College Head, who has been translated from the Headmastership of a Public School. Accustomed to discover that a certain irrational part of a boy's complex nature is in extreme cases more or less "amenable to reason," the late schoolmaster is prone to lose sight of the fact that in the case of young men the last appeal must be to the rational part. There was, by the way, a story current in Oxford some years ago that a certain learned Fellow of a College, a gentleman we may presume more cultured than obsequious, and favoring direct rather than euphemistic forms of speech, went on a mission in the company of another Fellow to interview a successful Headmaster with a view to offering him the vacant Headship of the College.

"I really don't think, Mr. —, that I have got a single qualification for the office," pleaded the Headmaster, speaking perhaps with Aristotelian "irony" or "desire to avoid parade."

"We were quite aware of that," was the answer, and subsequent events for the Headmaster was shortly translated—verified the judgment of both parties.

Your son, however, Cornelia, was not a "rotter" at school. You may send him, then, to the University in all confidence that he will not sensibly deteriorate. There must come a time when he will have to stand upon his own legs; and in life at a University he will have every opportunity of learning many useful lessons, resolving sundry doubts, forming new convictions, and passing the intermediate stage between school-life and busy manhood in an intellectual and pleasant-atmosphere. Of him, as of the traveller, one thing at all events may be predicted with certainty: "He may

go out a fool and he may come back a fool, but he won't come back the same fool."

But which University is it to be. Oxford or Cambridge? The answer to this question must depend a good deal upon the style of education that is required. The Cambridge curriculum is. I venture to believe, the sounder and more practical, but Oxford imparts more culture. I also fancy that Cambridge gets more continuous work out of the ordinary undergraduate, but that he who requires no pressure to induce him to work is in the way of acquiring more general information at Oxford. The Long Vacation "Term," if I may use the phrase, is a distinct advantage to the young Cantab. Only last year a young gentleman of some intellectual powers found himself invited to play in the University XI.; and though athleticism kept in due bounds is in no way antagonistic to intellectual pursuits, a series of three-day matches during term-time must interfere with a course of study. The young man's tutor, on being consulted, took the following line: "Play by all means; but the College expects other things of you besides cricket. Make up for lost time, then, by coming up to read in the Long."

There is no such fourth term at Oxford, and a reading party in the Long Vacation must be regarded rather in the light of a stop-gap than an efficient substitute. There is a story current that an eminent Head of a House once found it necessary to check the incipient desire of some zealous students to institute a Vacation Term by a judicious course of prayer and fasting-in other words, by increasing the number of compulsory chapels and curtailing the food-supplies. rumor is apt to attribute strange doings to celebrities.

It is, however, your son's ambition, you tell me, Cornelia, to become a bar-

rister. In that case he does not require either a scientific or a mechanical education, or yet a plethora of mathematics, so much as a knowledge of law and, generally speaking, a healthy intellectual life. Well, then, I am inclined to think that at Oxford rather than at Cambridge "the same individual," If he takes life seriously, has a better chance of "proving himself qualified for the most various kinds of action, and with the most graceful versatility."

But, again, to what College shall he go? For most decidedly, unless poverty compels, you will not send him up as an unattached student, any more than you sent him to a Public School as a day-boy. The non-collegiate, as Mr. Wells's book so truly says, "in most cases lives entirely outside the ordinary life of the University," and the Uitlander's position at Oxford is hardly more satisfactory than it was found to be in Pretoria. True, he is not taxed quite so heavily, but he is by way of being considered Mr. Nobody of Nowhere.

In the matter of a choice of College, Cornelia, you must be prepared to pay a little extra for "fashion." You have been so accustomed to do this in the case of your dressmaker that the intelligence will not come to you in the light of a shock. Fashion, as you know, varies from time to time, and the word itself is rather ambiguous. From one point of view Christ Church still is, and is likely to continue to be, the most fashionable College in Oxford. It is possibly not quite so fashionable to-day as it was during stately Dean Liddell's long tenure of office. But old traditions and family associations in some cases, in others the same desire to see his son in the smart set which prompts the "infernal manufacturer" to send that youth to Eton, will, unless the advent of the Rhodes scholars changes the whole tone of Oxford life,

continue to fill "The House" to overerowding.

"Every man of the middle class," said Thackeray, "likes to know persons of rank. If he says he don't, don't believe him."

So long then as "the public school boy who is born to the purple" continues to wend his way to Christ Church, so long will he find followers. But Christ Church is so essentially a house divided against itself and so much split up into cliques that it misses the intention of a College. The Westminster student has about as much in common with the member of Loders as the notorious crab-catcher in the St. Catherine's Torpid may be said to have with the stroke of the 'Varsity Eight.

There used, I may tell you, Cornelia, to be a tradition that the cook at Christ Church was a capitalist on a large scale. Do not, therefore, send your son to "The House" unless you can afford to give him an ample allowance. For where the purveyor amasses a fortune the undergraduate is likely to be heavily taxed.

Putting aside Christ Church, which, apart from the reasons I have mentioned, has vindicated its claim to be considered fashionable by providing England with three Premiers within the last thirty years, it is a curious fact, Cornelia, that "fashion," albeit in the opinion of a distinct majority of the undergraduate world dependent upon aquatic successes, has of late years proved a singularly correct guide to those of maturer age who rank distinctions in the Schools above distinctions on the river. Is this merely a coincidence, or was Mr. Pemberton in his literal rights, when in his chapter upon social life in Oxford he spoke of rowing as being "really compatible with and ancillary to more serious pursuits"? On the one hand, it is not in my memory that the Eton oarsmen,

from time immemorial have formed the backbone of the University crews, have as a class made very great show in the Schools. "Eyes in the boat" is an old coaching maxim, andfor the rowing man takes his work on the river very seriously-throughout some months in the year the minds also of the University oarsmen are likely to be more or less in the boat. On the other hand, one and the same system of training, which of course involves among other things abstinence from certain starchy foods, alcoholic drinks, late hours, and inordinate use of tobacco, is calculated to keep the mind as well as the body in a thoroughly healthy and vigorous condition. To many of us the intellectual power exhibited by men who apparently allow themselves no leisure for active exercise might be classified among the wonders of the world.

Probably, however, it will be found in Oxford College life that the continuous or chronic headship of the river, as evidencing the presence of that esprit de corps with which the wellbeing of the community is so intimately connected, in the first instance makes a College fashionable, and, later on, attracts to it good menother than rowing men-of all sorts and conditions. It stands to reason that the reigning authorities in a College, which by virtue of its popularity has once earned the right to pick and choose its alumni, are not likely to enter upon the books the name of any young man unless they are satisfied that on one ground or another he is seriously worth his salt. Men though we call them, undergraduates retain many of the characteristic features of boyhood, and boys again in certain matters are very sheep-like, easily infected by the atmosphere of the place they live in, and blind followers of fashion in thought and word, if not in deed. At this moment I have by my

side a letter from a highly artistic and singularly unathletic boy, who has lately gone to an essentially philathletic house at a Public School. Though I have good reason to doubt whether he will ever kick a football during his school career, and every reason for believing that much of his spare time is devoted to drawing, the letter teems with the football successes of his house and of individual players, while he omits all mention of his own favorite occupation. I may add that his school. in every way'so far as I know an excellent school, and full to overcrowding, in the first instance made its mark by successes in the cricket-field rather than by scholarship,

All this is by way of parenthesis. Cornelia, and to a lady-for I rather hope that you were not at Somerville or any other Oxford College for women-the "undemonstrated fact" about Oxford life will be more interesting than the "reason why." You may, then, take it as a starting-point that the four most fashionable Colleges in the Oxford of to-day are-Christ Church always excluded-Balliol, New College, University, and Magdalen. Between them these four Colleges seem to have practically farmed the headship of the river and to have supplied the majority of successive 'Varsity Eights for many years past, and furthermore to have justified Mr. Pemberton's conclusion that "rowing is compatible with more serious pursuits," by winning more than their fair share of Classes in the Honors Schools. Treading closely on their heels in the matter of fashion come Trinity, Brasenose, and Oriel, the last-named fashionable in the first instance by virtue of cricket and football rather than rowing. Before taking these Colleges in detail, let me repeat, Cornelia, that you must be prepared to pay a little extra for fashion. I note that Mr. Wells, who speaks from the point of view

of the Bursar of Wadham, tells us that "a man who wishes to live like other people but is willing to be careful may be at College for about £160 a year," and he adds that "a bursar of great experience at another College would consider £150 nearer the mark." Later on he says that "Oxford expenses have increased, and are increasing." Thisto take the latter statement first-we all of us know to our cost is by no means peculiar to Oxford. In these days of County Council, District Council, and so forth, rates and taxes are increasing by leaps and bounds, and the tradesman's natural remedy is to increase his charges. But about that £160 a year? A man may live no doubt at Wadham with tolerable comfort on that sum, but it does not at all follow that he will live with equal comfort on the same allowance at Magdalen. I have selected Magdalen simply and solely on this ground. Not long ago a personal friend, neither illiberal nor yet prodigal in his ideas, having it in his mind to send his son to Magdalen, made careful inquiries from people who knew the ins and outs of the place, and eventually fixed his son's allowance at £250. Doubtless, like a wise man, he left a margin for contingencies, and you will be well advised to adopt the same precaution, Cornelia. In any case, I should not recommend you to go below the figure of £200. I do not say that life is impossible at a lower cost, but it will not be comfortable. I have heard of a boy at Eton whose expenses were kept under £180, but his life could hardly be called the life of an Etonian. At a smaller College, where there is less scope or less necessity for entertaining, a somewhat smaller allowance may suffice for all purposes; and I can think of no better small College than Corpus, which may in the matter of the Honor Schools be said to hold the same relative position to Balliol that

some twenty years ago the "Bard" did to "Ormonde" on the racecourse. The Bard, I perhaps ought to tell you, Cornelia, was a compact and good little horse, and was never beaten till he encountered in the Derby a more loosejointed and equally good big horse.

Balliol is, at the same time, the most cosmopolitan and the most exclusive of Colleges-cosmopolitan because able men from all parts of the Empire congregate there; exclusive because the matriculation papers require a distinctly high standard of knowledge. While a good many commoners of Balliol could, if they had the will, win scholarships at nearly any other College in Oxford, the Balliol scholar may ipso facto be written down amongst the ablest young men of the day. There was, it is true, a suspicion, perhaps an unworthy suspicion, that during Jowett's reign the "schoolboy born in the purple" was allowed a certain amount of latitude in the ordinary Entrance Examination, and that a false concord was not accounted such a capital offence in his Latin prose as in that of the lad who hailed from Manchester Grammar School. But Balliol prospered under Jowett all the same, and he will always be remembered as a great Head of a great College.

New College, with a formidable array of Winchester Scholars, fairly holds its own with Balliol in the Moderations Honor lists; but in the final Schools of Literæ Humaniores, where a good deal more than pure scholarship is required, Balliol until quite recently has easily retained the pride of place. The enlarged New College of to-day owes no little of its prestige to the annual influx of a contingent of the best class of Etonians, who have done yeoman service on the river, on the cricket and football fields, and occasionally in the Schools. So long as New College could be described as being populated

by a great many old Winchester boys and a few others, it was in danger of lapsing into a state of stagnation. But the "open door," by introducing new blood and new ideas, has brought an access of vitality. "Rowing." to quote Mr. Pemberton, "has acted, and still seems to act, as a bond between the different sets and types of men who come from public schools or elsewhere; . . . cricket tends rather to form and foster more or less exclusive sets." Forty years ago I am not sure that New College had an Eight, certainly not a Torpid, at all; but for the last twenty years it has, by virtue of the Eton element, held its own with the best upon the river. Winchester and Eton, by the way, have always been on the most pleasant terms with each other, and the annual encounter on the cricket-field, though keenly contested, has been rather a friendly trial of skill than war to the knife like the Harrow fixture. If your boy was at Eton, Cornelia, you cannot do better than send him to New College, which for many years past has been well to the front in every department of Oxford life.

University, if no longer, as in the 'Sixties and early 'Seventies the natural home of the Eton oarsman, is again in a thoroughly sound and healthy condition. That to-day it owes its position on the river to Radley rather than to Eton exertions, may be partially accounted for by the circumstance that the energetic gentleman who coaches the Radley boat on occasion dons a College blazer, made in the consulship of Plancus. counsels and judicious management have extricated the College from the slough of despond into which it bade fair to sink in the early 'Eighties, when there was seething discontentment, if not open warfare, between the undergraduates and the common-room, foolish outbreaks against discipline on the part of the former provoking equally foolish methods of repression from the latter.

Magdalen, fair to see and admirable on many other grounds, is the more especially to be recommended for having in late years taken a new departure by creating a new official to whose lot it falls among other things to promote due harmony between the Senior and Junior common-rooms, by keeping in touch with the undergraduates, and forestalling possible occasions of friction by appealing to their common-Other men in other Colleges sense. have doubtless done much the same form of good and useful work, which in the last few years has been done by successive Deans of Divinity at Magdalen; but to the best of my knowledge there has not elsewhere been any serious attempt to give to this "protector of the poor" an official position. If Magdalen is not quite so successful as its three great rivals in the Honor Schools, what Mr. Brabant says about the summer term will be found to hold good of this genial College-namely, "that under the frivolous-seeming surface much solid work has been going on." A slight drawback to a College situated among very beautiful surroundings is that the Magdalen walks and the adjacent region of Mesopotamia, so attractive to visitors in the May term, are at certain seasons of the year highly suggestive of damp fogs and river-hatched miasmata.

Having sketched roughly and in outline some features of what I choose to regard as the four most fashionable Colleges, Cornelia, I will dismiss some of the many others very shortly. Brasenose was a great rowing College in the past, and for a year or two some decades back was capable of beating the rest of the combined University at cricket. From Oriel came Cecil Rhodes, whose benefactions to the University promise fair to leave

as indelible an impression upon Oxford life as his career did upon the map of the Empire. Whether the far-reaching schemes of Cecil Rhodes were an unmixed blessing to England is a matter for the future historian to decide; but of the intrinsic greatness of the man, of his love for his country, and loyal devotion to his College and his University, there can be no manner of Worcester, St. John's, and Wadham have very beautiful gardens; but beyond this fact I know nothing that is particularly interesting about any one of the trio. Exeter attracts to its portals a good many Devonians; and Jesus, on the opposite side of Turl Street, is the house of the Welshmen, -not the élite of Wales by any means, for the aristocracy of the Principality seem to prefer to go to any other place than the College where the native dialect is predominant. In bygone days there was a lively animosity between Exeter and Jesus, and a student of the former College was credited with having summed up the history of the latter in doggerel rhyme-

> This college was built By Morgan ap Rhys, In the time of Queen Liss, For a pack of Welsh geese, What like toasted cheese One great big piece, Here it iss.

As a rule, Cornelia, setting aside the question of close scholarships, I cannot see that there is anything to be gained by sending your son to a particular College, because he may chance to have been born or brought up in a particular locality. Whatever tends to make a young man cliquish or groovy is opposed to the purpose of University life, which aims at the acquisition of new ideas and the enlargement of the circle of acquaintances.

Apart from the Eton Club, to which your son if he hails from Eton will naturally belong, there are two prominent social clubs, either or both of which he will be well advised in joining, though at one certainly I am not prepared to guarantee his election. These are Vincents, limited and exclusive, and the Union, for which, I believe, membership of the University is the sole necessary qualification. While it is true that the majority of 'Varsity oarsmen and cricketers, provided always that they have been from other points of view acceptable members of society, have been at one time or another members of Vincents Club, it would be unfair to speak of it as a society of athletes pure and simple. About a quarter of a century ago. within a period of four years, Vincents numbered among its members the late Cecil Rhodes; a now well-known ex-Postmaster of Merton, reputed at Oxford, justly so, I believe, to be the cleverest man of his day; the present Viceroy of India; the present First Lord of the Admiralty, and one or more less prominent members of the present Administration. Not one of the four celebrities I have mentioned possessed any claim to be called a great athlete: but my recollection is that the last trio raked in at least six first classes in one School or another. Rhodes, even in those days, had too many irons in the fire to bestow much attention upon scholarship. Membership of Vincents, Cornelia, is accounted in Oxford circles as a diploma of respectability.

The Union, wholly apart from its being a pleasant trysting-place, is a valuable training-ground for him who, like your son, is a future barrister, and may be said to be—

Fortia verbosi natus ad arma fori.

He will have to go elsewhere, it is true, to obtain his legal knowledge, but the debates at the Union will give him the opportunity of airing his youthful eloquence before a highly critical audience. The much-enduring Ulysses,

whose astuteness might have made him a very potent advocate had he lived in this twentieth century, would most assuredly have joined the Union and availed himself of a golden opportunity of studying the ways and methods of the many-sided humanity which congregates there, though as a member of the Council of Chiefs he would also have "put up" for Vincents, evolving some crafty scheme of cooking the votes to secure his election. Agamemnon, with his more exclusive tendencies, might have accepted the Presidency of Vincents, and from that high elevation regarded the Union with indifference or pitiful contempt. Of the pair, Cornelia, Ulysses was the better man to follow. Let me, however, add this warning note. Before now, a young man, to whom a First in the Schools was a matter of vital importance, has wrecked his chances by allowing forthcoming debates at the Union to engross too much of his time and attention. It is well enough, with all due respect to Aristotle, that an undergraduate should be a student of politics; well, too, that if he intends to embrace one of the learned professions he should practice the art of oratory: but, after all, a debate at the Union about some burning question of the day is a little suggestive of children playing with tin soldiers.

The Gridiron, an institution of comparatively modern growth, has done good work by solving the problem of giving the undergraduate a respectable dinner at a moderate cost. Dinner in Hall is, commonly speaking, a comfortless meal, eaten in an atmosphere of noisy conversation. But it has sensibly improved since the disappearance of the "Meat Commons"-a truly barbaric form of entertainment. The Meat Commons, Cornelia, was a sort of Benjamin's mess, a quantum of beef or mutton or any other meat, not larger perhaps than a very hungry man would eat, but larger certainly than any respectable Christian would care to see on one plate. I find myself wondering to-day, as I used to wonder as a child, whether Benjamin rose to the occasion and over-ate himself or his brothers were starved; and whether Benjamin had five helpings to their one, or received his quintuple portion all told upon a single plate. In the latter case he would have felt quite at home in a College hall where the Commons system was in vogue. Generally speaking, the "Commons" system-apart from the question of a Meat Commons-may be described as a nasty compromise between economy and extravagance, whereby the undergraduate is mulcted in the interests of the scout.

For instance, if I lunch at my Stores I pay a penny for my bread, and though I generally find a pennyworth sufficient for my requirements, I know that I can get more by paying another penny. At my luncheon in College many years ago the extra allowance of bread, much more than I was likely to eat, was produced and charged for as a matter of course, my scout pouching the overplus. The Oxford scout, I may tell you, Cornelia, has many sources of revenue, more even than a railway porter; but the undergraduate who gets a good article for his money will do well to pay up and ask no questions. The whole principle of legalized plunder is doubtless immoral, but you yourself probably connive at a similar form of immorality when you tip your hosts' servants. If your son is a wise man he will not tamper with the traditions of the past or openly object to paying for more than he consumes. But, on the other hand, he will not be studying the interests of the community if he fails to report to the Bursar any act of palpable dishonesty on the part of the scout, who is not his own private servant, but the servant of every man on the same staircase.

One word in conclusion. It is to be hoped, Cornelia, that your son is not possessed by that all-absorbing love of athletics which will divert his mind from the serious work of University life and cause him to regard the late delivery of the "Sportsman" in the light of a calamity. Short—far short—of this, it is expedient and almost necessary that he should in some form or other be a game-player, and even a successful game-player. With the young man who takes his exercise in the form of what we call a "constitu-

which has been said "to irritate the temper without opening the pores," I confess that I have little sympathy, still less with the habitual loafer, whose ulterior motives it is my nature to suspect. Athleticism—in moderation always—is part and parcel of University life, and he will be best following the Preacher's advice to "rejoice in his youth, and let his heart cheer him in the days of his youth," who keeps his eye clear and his mind and body alike vigorous by taking his relaxation in the form of games which for the time being bring all his energies into play.

tional walk," or even in golf, that game

Blackwood's Magazine.

BOOKS AND AUTHORS.

The continuing popularity of Dickens is attested by the fact that more than 200,000 copies of his various books were sold in England during the month of December.

Lady Margaret Sackville has almost ready for the press a second volume of verse. It will be published under the title of "A Hymn to Dionysus, and other Poems," by Mr. Elkin Mathews.

The Athenæum, remarking upon the death of General Lewis Wallace, characterizes "The Fair God" as the best of the general's stories, despite the enormous circulation achieved by "Ben Hur."

Despite what a prominent publisher has recently described as "the slump in poetry," verse figures very prominently in the spring announcements in London, and is not wanting from the list of the publisher who expressed himself so gloomily.

Mr. Bennet Burleigh, back from the

war in the Far East, has arranged with Messrs. Chapman and Hall to publish a book on his experiences and the probable results of the war. The book will be illustrated and similar in size to his "Natal Campaign."

E. P. Dutton & Co. have in preparation "Lhasa and Its Mysteries" by Lieutenant Colonel L. Austine Waddell, who accompanied the expedition of 1903-4, which opened to view the sacred capital and its cherished mysteries. The book will be freely illustrated.

Maxim Gorky has turned his imprisonment to good account, having written during his incarceration a new play entitled "The Children of the Sun." The drama deals with the revolutionary movement and is regarded by the author himself as his masterpiece.

Mr. Stephen Phillips, in his next volume, is to undertake the rehabilitation of the character of Nero, and has a cheerful confidence that he will be able to give quite a different presentation of him from that usually made. He views Nero as merely an æsthetic placed in a position of omnipotence.

Mr. John Murray will publish a little posthumous work by Lady Dilke which she called "the Book of Praise," and with it in the same volume two of her fanciful tales, "The Last Hour" and "The Mirror of the Soul." These latter were ready for an intended volume of stories, and bear on the same subjects as "The Book of Praise." A memoir will be prefixed by Sir Charles Dilke, relating chiefly to the life and letters between 1858 and 1884 inclusive.

An important find of manuscripts is reported from Schwalgental. They are well preserved for the most part, with beautiful colored initial letters. The most interesting of the twenty-two MSS., which include hymns, prayers, texts, and psalms in Latin, are those containing music, as they present excellent specimens of the notation of the Middle Ages, probably the tenth century, as well as of that in use from the eleventh century to the fourteenth.

"A Diary from Dixie" which is soon to be published, is written by Mrs. Chesnut, who was the wife of James Chesnut, Jr., United States Senator from South Carolina, 1859-1861, and afterwards A.D.C. to Jefferson Davis, and a Brigadier-General in the Confederate Army. In this journal she gives pictures of the social life that went on without interruption in the midst of the war; of the conditions that resulted from blockaded ports and of the events that took place in Charleston, Montgomery, and Richmond.

Messrs. Longman propose to publish

a History of England, from the Conquest of Britain to the end of the reign of Queen Victoria, in 12 vols. This is intended to set forth in a readable form and a single work the results attained by modern research. In its scope the new work will primarily be political, though religious matters will necessarily at certain periods have a prominent place, and important social phenomena will be noted. Each of the twelve volumes is to be written by a separate author, but unity of design and treatment is promised.

English as well as American journalism seems to be in a state of transition. One of the most surprising of recent changes is the merging of the St. James's Gazette with the Evening Standard under the title of The Evening Standard and St. James's Gazette. The Gazette was started by Mr. Frederick Greenwood, who had long been editing the Pall Mall Gazette, of which also he was the founder. When the Pall Mall Gazette changed its ownership and its principles at the same time Mr. Greenwood left it and soon after established the St. James's Gazette. During his editorship the St. James's Gazette, it is said, read like a first-class magazine issued nightly. 'Mr. Greenwood was succeeded by Mr. Sidney Low and he in turn by Mr. Hugh Chisholm. The Academy remarks that the present amalgamation is very singular, because the distinction of the Evening Standard has always lain in the promptitude of its news service, while the traditions of the journal now merged in it are those of leisurely and quiet The Academy itself, by the culture. way, is passing through a transformation which relieves it of the scrappiness which has characterized it of late; and promises to give it the dignity and literary value of the best weekly literary journals of the metropolis.

